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Tin Mining in Cornwall during the Inter-War Years 1918–38: A Chronology of Responses to the Changing Market Conditions¹

By Norikazu Kudo

Abstract

Though marginal in terms of the world production, tin mining in Cornwall was an important sector in the local economy in the inter-war years 1918–38. To survive in the changing market conditions Cornish mines made every effort to keep the operation on. While they preferred the price control by the combination of world big producers, they continuously asked for financial assistance to the Government. Based on public documents and articles in local newspapers, their responses to the changing market conditions are investigated in a chronological order with special reference to the logic and reasons used during the process of negotiation for the financial assistance to find the difference in the position between them and the Government.

Key Words

Tin mining, Cornwall, inter-war years, market intervention, combination, Government subsidy, promotion of industry, social policy.

Introduction.

Few works have been written on overall features of the Cornish tin mining industry during the inter-war years in comparison with the history of individual mines² since Rowe's paper of 1975.³ In one sense it is natural, because, as the editor of the book in which Rowe's

¹This paper is revised and extended version of three articles written and published in Japanese recent three years. I am especially grateful to Roger Burt for his valuable advice. He encouraged me to write this paper and provided me with photocopies of *Cornish Chamber of Mines Yearbook*. I would also like to thank Mike Gill of Northern Mine Research Society for supplying me with photocopies of articles of *the Mining Magazine* categorised by him for the relevant period. All errors can be found are, of course, entirely my own.

²Buckley, South Crofty, Dolcoath; Corin, Levant; Harris, Dolcoath; Heffer, East Pool; Noall, Geevor and so on.

³John Rowe, 'Declining Years of Cornish Tin Mining' in Jeffery Porter (ed.), *Education and Labour in the South West: Exeter Papers in Economic History No. 10*, (Univ. of Exeter, 1975), pp. 59–77. At that time *Royal Cornwall Gazette* and *West Briton* were two major newspaper sources available continuously. Therefore, his article was entirely based on these. Now the British Newspaper Archive has been established with newspapers in digitised forms and more efficient search has become possible for a wider range of local newspapers. Penzance based weekly *Cornishman* and **

work was published pointed out, the time was long gone when the industry as a whole enjoyed its prosperity. After it had continuously recorded fairly large output until the early 1890s, a massive reorganisation in its company forms, from the long-established cost book company to the modern limited liability company to finance the increasing demand for capital, took place. In spite of this reorganisation the output of the industry never responded accordingly to the relatively favourable market conditions before the outbreak of World War I.⁴

By that time it entirely became a kind of marginal producer in the world tin mining as what Matthews mentioned in 1990.5 Since the major low cost producers such as Malayan alluvial mines sometimes gave priority of their operation to working with rather hard but still cost recoverable ground during the period of high metal price, while retaining the easy ground from which minerals could be obtained with low cost in order to recoup the increasing capital investment steadily in the long run. When the market turned into an adverse condition, they often extracted minerals from the retained low cost ground. This behaviour gave opportunity for high cost lode mines such as those in Cornwall to coexist with low cost mines such as Malayan alluvial mines during the period of high price. Thus, high cost mines as a whole were not linearly driven out of the market when the price was high. When the price fell, the low cost producers could still make profit by operating with the easy ground which had been retained during the period of high price. This meant that the output from low cost producers did not shrink with the same pace of the fall in price, in other words, the excess supply did not diminish drastically for the time being; the high cost producers had to cope with this position for longer time. The mines which can coexist with low cost mines under the favourable market conditions, and which also struggle to survive for lengthy time under the reverse conditions will be defined as 'a marginal producer in mining.' From the context above mentioned the level of the market price of tin was an essential factor for survival of Cornish mining.

Though marginal in the world production, mining industry was an important sector in the local economy of Cornwall. Figure 1 shows the trend in the number of employment in tin mining in Cornwall from 1913 to 1938. Since the employment figures are those for the mines which employed more than 10 people at least for one year during the period, the actual number of employment was much higher than those shown in the graph. In the county with 320 thousand populations, it will be safe to say that the industry with its long tradition still had importance, both in economic and social spheres of the county. Earnest Brown, the Secretary for Mines, correctly pointed out this situation in his speech delivered to the mining people in Camborne in 1935.⁷

(For last 20 years) when Cornish Tin Production fell off coincided with falls in the market price. That was really the whole of the world's basic economic problem. The fact was that while the subject of Tin was of tremendous importance in the economy of mining district of Cornwall, the output of Cornwall was but a small fragment of the

[➤] Plymouth based daily *Western Morning News* are among them. I am fully benefited by this development. But sometimes this led me to some biased opinions appeared in these newspapers. Being aware of this limitation I dare to write an outline of Cornish mining from their points of view to investigate the attitude of some parts of Cornish people during the period

⁴Barton, A History of Tin Mining, Chap. IV, also refer to Burt and Kudo, 'Not by Tin', Figure 1.2, p. 28.

⁵Matthews, 'Serendipity', pp. 22-4.

 $^{^6}$ The reason why they took this kind of behaviour is still arguable but they were often regarded as 'well managed mines.' *WMN.*, 22 Jun. 1927, p. 9.

 $^{^7}$ Minister of Mines on Tin Control, Letter from the editor of Tin to Earnest Brown, POWE 22/60; Corn, 7 Mar. 1935, p. 7.

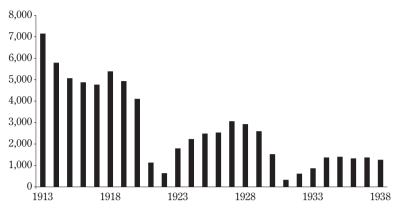


Figure 1 Number of Employment in Tin Mining in Cornwall 1913-38

Note: Yearly aggregated figures for mines which employed more than 10 people at least for one year during the period 1913-38.

Source: Calculated from Burt &c., Mining in Cornwall and Devon, attached CD, (2014).

world total, and the Cornish industry was almost entirely dependent on the maintain of a certain price level for the metal in the world market.

I venture here to illustrate some aspects of responses made by Cornish mining, which was marginal in terms of the world production but important for the region, to the changing market environment. Before proceeding to the discussion, features and major changes which took place in the world tin market *viz.*, fluctuations in the metal price, the emergence of big capital, and tendency toward combination or cartelisation, are briefly observed first.

I The Changing World Tin Market.

The changes in the world tin market during the period and the formation of international tin price control scheme have been extensively written by the late Professor Hillman.⁸ Therefore, only notable features are summarised here.

I-1 Major Producing Countries.

Figure 2 shows the output of tin in terms of metal content in tin concentrates from 1913 to 1938 with distinguishing figures for major four countries which originally participated in the first international tin control scheme in 1931; Malaya (Federated Malay States, Un-Federated Malay States, and Strait Settlement), Netherlands East Indies (NEI), Nigeria, and Bolivia, from other countries. In the same graph the average price of metallic tin at London Metal Exchange, 'Standard-Cash', for each year is given together with the price curve deflated with a whole sale price index.

Though there were some fluctuations in their output, dominant position of Malayan mines in the world market can be easily recognised. In Malaya large investment made by British capital, especially by newly emerging John Howeson's Anglo-Oriental Mining

⁸ Hillman, The International Tin.

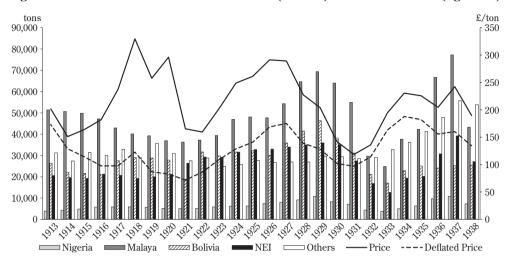


Figure 2 Tin Ore Production in Terms of Metal (left axis) and Price 1913-38 (right axis)

Production: Metallic tin in tin concentrates, Price: Average price of 'Standard Cash' at London Metal Exchange, Deflated Price: Price deflated with wholesale price index in B. R. Mitchell and Dean, *Abstract of British Historical Statistics*, (Cambridge, 1962), pp. 476–7.

Sources: Production, Imperial Institute, Mineral Industry each year. Price, Robertson, Report, p. 125.

Corporation and already existing mining enterprises originated from Cornwall *eg.*, Redruth Group and Tronoh Group, was overwhelming to extract tin with Dredger technology, though there were non-negligible productions by traditional Chinese mines most of which were using Gravel Pump technology. Mines in NEI like Billiton and Banka were basically controlled by the NEI Government, and contract mining with Chinese miners was predominant. Bolivia made a great progress in the mid-twenties, while the production by Nigerian Mines stayed relatively small. In Bolivia the emergence of a mining tycoon, S. Patiño was remarkable. He controlled over a half of Bolivian production and a quarter of the rest In Nigeria European investment, mainly British, was dominant, and later Anglo-Oriental became virtually monopolistic. Production by these four countries occupied almost over 70% of the world production until 1931 when the international tin control became effective. The British Empire; Malaya, Nigeria, Australia and Cornwall continuously accounted for nearly 45% of the world tin production for the same period.

Most of Malayan tin ores were smelted in Malaya and shipped to the U.S. which was the largest consumer of tin metal in the world. Bolivian and Nigerian tin ores were mostly smelted in England and consumed in the U.K., European countries and the U.S. After completion of Arnhem smelting works in Netherland NEI tin became smelted there. Therefore, the predominant position of the British Empire in tin smelting was notable. In this

⁹See Hillman, The International Tin, pp. 62-75.

¹⁰ Hillman, The International Tin, pp. 82-3.

¹¹Geddes, *Patinño*; Griess, 'The Bolivian Tin', pp. 238-50; Granados, 'Bankers and Entrepreneurs', pp. 46-73; Hillman, 'Bolivia and International Cartel', pp. 83-110.

¹²Hillman, *The International Tin*, pp. 75–8. At the renewal discussion of the tin price control scheme, Howeson was involved in negotiation as a representative of Tin Producers' Association but he was sometimes confused as the representative of Nigerian Government. *Hansard*, 27 Feb. 1935, vol. 298, cc. 1113–6.

¹³Calculated from Imperial Institute, Mineral Industry each year.

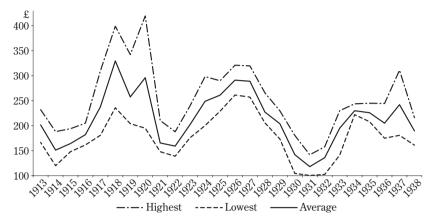


Figure 3 Fluctuation in Price of Tin Metal 1913-38

Source: The Tin Producers' Association, *Tin: World Statistics 1938*, (London, 1938), p. 22. For 1938 Average: Robertson, *Report* p. 125, Highest and Lowest: gathered from newspapers.

sector Patiño of Bolivia, Anglo-Oriental's Howeson, and Dutch smelters became oligopolistic by the 1930s. In the course of this process long established smelters in Cornwall almost disappeared. But, as Hillman mentioned, since these big tin smelters had not own financial resources, they could not have big influence to the tin market. Thus the tin market were basically affected by the behaviours of mining sector and consumers, except for temporary speculation by metal dealers in three major markets; London, Singapore, and New York.

I-2 Fluctuation in Price.

According to Thoburn, since tin was mined in relatively limited countries while the demand for it was universal, a small change in the demand and supply position tended to lead a big fluctuation in the price. 16 Changing annual average prices are already shown in Figure 2. From it three major fluctuation cycles are observed; 1913-21 with the trough in 1914 and the peak in 1918, 1921-29 with the trough in 1922 and the peak in 1926, and 1929-38 with the trough in 1931 and the peak in 1937. When we look at the deflated curve given in the same graph since the fairly large fluctuations in commodity prices characterised these years, there are five distinguished trends; the downward trend to 1921 except for 1918, the upward to 1927, downturn to 1931, and upturn to 1934 followed by the downward trend to 1938. According to Hillman there are two different schools to interpret the overall trend in the 1920s, that is, a view regarding it as the process of formation of a new upward trend and the other view regarding it as divergence from the trend already established. If we take the former interpretation, intervention in the market will be justified to correct the abnormality, but if we take the latter, the adjustment has to be left to the market itself and intervention should be limited only for the purpose of moderating social problems temporarily, otherwise it distorts the function of the market.¹⁷

Figure 3 shows the highest, the lowest, and the average prices of metallic tin in the year

¹⁴Barton, A History of Tin Mining, p. 266.

¹⁵ Hillman, The International Tin, p. 98.

¹⁶Thoburn, *Tin*, pp. 11-2.

¹⁷ Hillman, The International Tin, pp. 55-6.

to examine the degree of fluctuation within one year. Other than the war years, 1920, 1924, 1930 and 1937 were years in which big gaps between the highest and the lowest were clearly observed. As we will discuss later, mostly those years except 1924 are also the years when the issues of state aid to Cornish mining filled the pages of local newspapers. From Figures 2 and 3 we can understand that how to regulate the fluctuation to keep the price within a certain range was the principal question in the market.

I-3 Emerging Big Capital and Tendency toward Combination.

Though the control of tin price by combined producers was pioneered by 'the Bandoeng Pool' in 1921, the substantial movement for cartelisation started in 1927–8 when the market turned into adverse trend from its peak. John Howeson initiated the movement to discuss the possibility of price control with NEI producers and US consumers. But at this stage it was just a discussion. In July 1929, as the price fluctuation was getting worse in the depressed market, Howeson succeeded in persuading Malayan and Nigerian producers to organise the British Tin Producers Association (TPA) with the official purpose of research into the tin market to avoid unnecessary price fluctuation. Originally 167mines in Malaya, Nigeria, Cornwall, Burma, and Australia, which occupied 45% of the world production, participated in this association. ¹⁸

Facing the drastic fall in the price in 1930 and urgent necessity of cutting excess supply of tin in the market, TPA first tried to retain the stock at smelters for a while. But the association was based on voluntary cooperation in its nature and had not ample financial resources for the scheme. Therefore, it was difficult to bring all members with different interests eg., Malayan low cost producers and high cost Nigerian and Cornish producers, into the scheme. They soon started seeking compulsory reduction in production by collaboration with NEI and Bolivian Governments. After necessary legal procedures in the U.K. Government, the First International Tin Control Scheme became effective on the 1st March 1931 with original participating mines in Malaya, Nigeria, NEI and Bolivia. Siam joined the Scheme later. 19 The Scheme was renewed in 1934 and 1937 to regulate the tin market by quota control in production calculated from that of 1929 which marked the biggest volume of output in the history. After the second Scheme the creation of temporary buffer stock was also made. Cornish mines whose production was so small were not expected to join the first agreement. At the renewal in 1934 the major mines in Cornwall, South Crofty, East Pool and Geevor, signed Gentlemen's Agreement with the Scheme.²⁰ Though the British Government for Malaya and Nigeria, Dutch Government for NEI, and Bolivian Government involved in the negotiation, the nature of this scheme was basically regarded as private in distinction from the Tin Control after the World War II with international governmental agreements. It was in fact a kind of cartel by major international producers.²¹

¹⁸ WMN., 12 Jul. 1929, p. 9; 17 Jul. 1929, p. 9; Hillman, The International Tin, pp. 101-3.

¹⁹Hansard, 20 Feb. 1931 vol. 248, c 1635; Memorandum by the Colonial Office, 7 Jan. 1931, CAB/24/219/7 and 5 Feb. 1931, CAB/24/219/34; Cabinet Meeting, 18 Feb. 1931, CAB/23/66/15; Hillman, *The International Tin*, pp. 111-9. ²⁰Corn, 28 Jun. 1934, p. 5; POWE22/60, Arthur Thomas to Nott-Bower (Assistant Under Secretary, Department of Mines) 14 Jul. 1935; Hillman, *The International Tin*, p. 175.

²¹BPP. The Tin Crisis, Vol. 2, Minutes of Evidence (Trade and Industry Committee, Session 1985–6), Appendix A, p. 48.

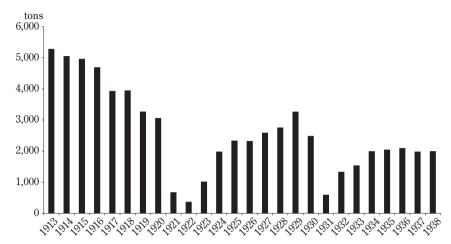


Figure 4 U.K. Tin Ore Production in Terms of Metal 1913-38

Source: Imperial Institute, Mineral Industry each year.

II Cornish Experience.

Figure 4 shows U.K. tin ore production in terms of metal for the corresponding period. Since over 95% of tin production in the U.K. came from Cornwall, hereinafter the output of U.K. will be identified with that of Cornwall for descriptive purposes. It generally indicates the same tendency as the world production but with much violent fluctuations. In the years in 1921, 1922 and 1931 virtually only one mine was operating in this part of country. In fact mining in the county was literally on the verge of dying of the harsh market conditions. Emphasising notable topics on state aid to Cornish mining, its experiences in the above mentioned world market are observed next.

II-1 During the World War I 1914-18.

In the first two years of the War the output of tin in Cornwall maintained around 5 thousand tons level, but after that it dropped sharply to under 4 thousand tons. At the early stage of the War no preferential consideration was given to tin miners in recruiting to the Army. It is said that they were massively recruited since their skills as miners were extremely valuable for digging tunnels and trenches. For example, from Grenville United Mines 180 miners out of some 500 miners were recruited to the War. Later this kind of recruiting was to some extent restricted as tin metal was regarded as strategic commodities as well as Wolfram and Arsenic which were mostly produced in tin mines in Devon and Cornwall. This recruitment resulted the shortage of skilled miners and eventually caused the suspension of development work that was essential for high cost mines to keep their cost low. Because discovery of easily extractable ore deposits was one of principal factors to reduce the average cost of the mine. Intensive operation with already existing deposit by

²²Barton, *History of Tin Mining*, pp. 248-50.

²³ Evidence given to the Departmental Committee by J. Nile (Manager of Grenville United), BT329/4.

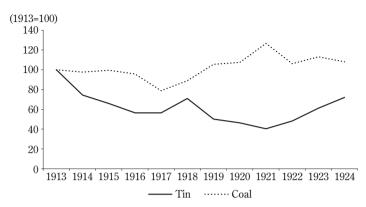


Figure 5 Comparison in Movement of Real Prices between Tin Metal and Coal 1913-24

Note: Real Price: Price deflated with wholesale price index in Mitchell and Dean, Historical Abstract, pp. 476–7. Tin: Standard Cash, Coal: Coal at pit. Sources: Tin: Robertson, Report, p. 125, Coal: Supple, History of the British Coal, pp.

unskilled labourers inevitably caused rapid exhaustion of the ore and, consequently, rising cost.²⁴ The output figures for the years of 1916 onwards clearly indicate this problem.

As the War prolonged the price of tin metal soared extensively till August 1918 when it recorded the highest level at over £399 per ton. But when we look at the deflated tin price curve, increase of the price is not noticeable, or in fact it was basically downward trend except for 1918. If we compare the real term price of tin with that of coal, it never recovered the level in 1913 while that of coal substantially maintained the pre-War level. Figure 5 shows this. In other words the year of 1918 was the only chance to regain the pre-War price level for tin in real terms. But in August of the year Allied Powers agreed to purchase strategic commodities such as tin jointly to distribute them effectively according to the demand of each country. Thus it was said that the interests of the allied countries, eg., the U.S. with rich copper but poor tin and the U.K. with rich tin but poor copper, were to be adjusted in such a manner. This joint purchase scheme in 1918 stopped the momentum of soaring price in tin, particularly in New York market. The one witness of the Departmental Committee organised in 1919 to investigate non-ferrous mining industry gave evidence to the committee saying that if the joint purchase scheme had not been adopted, the price of tin would have soared to over £600. 25

Years 1917–18 were also characterised by industrial dispute mainly on the wage level. Unionism was gradually penetrating in the region, though 'tributers' tradition, or illusive profit sharing pay system, was still strongly-rooted there. Miners soon became to demand the monthly pay rise since the level of wages was apparently lower than that of coal miners. On the employers' side they were not so accustomed to the general pay negotiation partly caused by the traditional wage system based on contracts.²⁶ As they also suffered severely from rising material cost particularly in the price of coal, they were basically reluctant to

²⁴The Report, paragraph 35.

²⁵Evidence given to the Departmental Committee by Cecil Budd (worked for Ministry of Munition during the War), BT329/9.

²⁶Mining Magazine, Vol. XVII (1918), p. 232.

raise the wage level. In January 1918 employers of major mines and the Union agreed temporary pay rise by 5–10% for the three months from January to March.²⁷ But after this the negotiation between them made no remarkable progress, and the both sides asked the Committee on Production for arbitration.²⁸ The wage question itself was settled for a while according to the committee's arbitration²⁹ but their claims gradually directed to the Government which did nothing to compensate the damage caused by its actions during the War; recruiting miners to the War in expense of development work, the market regulation based on the joint purchase scheme of allied forces, and favourable treatment given to coal mining which eventually caused the rise in material cost.³⁰

II-2 Immediately after the War 1919-23.

The Armistice brought big change in the tin market with restoring the ocean traffic from the East and destocking policy of tin metal adopted by the U.S. Government.³¹ The price of tin dropped drastically. To cope with this difficulty by the joint effort of workers and employers the Joint Industrial Council, which had been promoted by the Government during the War, was formed for Cornish tin mining in January 1919 with the first chairman, C. A. Moreing, an internationally well-known mining consultant and the chairman of a London-based company which was managing East Pool Mine, and the vice-chairman, J. Harris, a regional Secretary for the Dockers' Union.³² The inaugural meeting soon turned into the one to appeal to the Government for thorough investigation into the condition of the tin industry.³³ Early February in 1919 the deputation from Cornwall met William Bridgeman who was the Parliamentary Secretary for the Board of Trade at that time and asked him to examine the position of the industry and assist the industry to tide over the depressed market in compensation for the damage in the War. Bridgeman promised thorough investigation but it took several months for forming the Departmental Committee.³⁴ Even while waiting for the creation of the committee, the condition of the industry was getting worse. C. V. Thomas, an active advocate for Cornish interest as a member of Cornish Chamber of Mines who was also the chairman of Tronoh group in Malaya, said to the local paper, 'the Board of Trade intends, after the patient is dead, to consider steps by which he may be kept alive.'35 In the end of July Auckland Geddes, the President of the Board of Trade, decided to form the committee to investigate the condition of non-ferrous metal mining.³⁶

From August to March next year the committee held 60 meetings and 72 witnesses were invited to give evidence. From Cornwall, representing employers, R. A. Thomas of Dolcoath and, representing mining labourers, J. Harris, were among the members of the committee. The Report of the committee (hereinafter *the Report*) was published in March 1920.³⁷ *The Report* devoted 6 pages out of 23 pages to tin and associated minerals; arsenic and wolfram. Though 'the least desirable tradition' inherited from the cost-book system,

²⁷Mining Magazine, Vol. XVIII (1918), p. 54.

²⁸Mining Magazine, Vol. XVX (1918), pp. 34-5.

²⁹ Corn., 30 Oct. 1918, pp. 5, 7.

 $^{^{30}}$ Corn., 30 Oct. 1918, p. 5. About the nature of the intervention in 1918 was also discussed in the same column.

³¹Yip, The Development, p. 154.

³²See BPP [Cd. 8606], [Cd. 9002], [Cd. 9085]; Mining Magazine, Vol. XIX (1918), p. 34, Vol. XX (1919), p. 97.

³³ Corn., 22 Jan. 1919, p. 7.

³⁴ Corn., 12 Feb. 1919, p. 2.

³⁵ Corn., 23 Apr. 1919, p. 2; 9 Jul. 1919, pp. 2, 7.

³⁶A. Geddes, Memorandum from the Board of Trade, 28 May 1919, CAB/24/80; 28 Jul. 1919, CAB 24/85.

³⁷ *The Report* was published as a Parliamentary Paper [Cmd. 652] while the evidence and documents given to the Committee were deposited in the National Archives as BT 329/1-37.

that is, tendency to the under-capitalisation caused by the operation on short term bases, was condemned,³⁸ the general tone in writing of *the Report* was at most favourable to Cornish mining, by mentioning the reasons for the need of special consideration to be given to tin mining as follows;³⁹

- (1) The price of tin was depressed by direct Government action, and if the Government had not intervened the price would have reached, and been maintained at a much higher figure during the later period of the war.
- (2) The price of tin, in consequence of Government action, was depressed to the extent of approximately £100 per ton, with consequent loss to the Cornish tin-mining industry.
- (3) The tin-mining industry in Cornwall did not receive Government assistance similar to that given to certain other industries, nor was its labour protected to the same extent during the war.
- (4) The maintenance of the tin-mining industry is an insurance for supplies in case of emergency.
- (5) In the present state of the exchange it is to be benefit of the nation that the production of home supplies should be encouraged by every legitimate means.

The Report subsequently described the difficult position of the industry caused by the lack of development work during the War due to the extreme shortage of skilled labourer. The Report also mentioned the situation of the wolfram whose development work was encouraged by the Government during the War for securing the strategic material for making high-speed steel. But at the end of the War the Government stopped the support to the mines. Some mines in Cornwall like Tincroft Mine sacrificed development of tin deposit for production of wolfram. For Hemerdon Mine in Devon the Government itself initiated the development work of wolfram deposit. The stoppage of support was causing confusion in wolfram mines. In concluding part of the Report as a recommendation of the committee the following text was included.

....in regard to State aid to mining the Government should take powers, analogous to those in force in the Dominions, to extend financial assistance, on the advice of the Mines Department, to mining companies to enable them to tide over their difficulties or to undertake approved exploration and development; and that the funds at the disposal of the Development Commissioners should be made available for this purpose.

Referring concretely to the possibilities to use the funds of the Development Committee (based on The Development and Road Improvement Fund Act of 1909) by extending the legal interpretation of the Act gave hope to the Cornish people. But it was literally 'a recommendation' which soon became an illusion. *The Report* accompanied 'Reservation' written by representatives of labourers recommending nationalisation of the minerals and mines, and establishing systematic working by the State to avoid unnecessary closed-down of mines by

³⁸ *The Report*, paragraph 46. When accused by the committee member of the excessive dividends paid by Grenville United Mine immediately before the War, Abercrombie, the secretary of the mine replied, '(they) did not anticipate we were going to be plunged into a war', BT 329/4.

³⁹ The Report, paragraph 30.

⁴⁰ The Report, paragraph 50.

⁴¹ The Report, 'Summary of Recommendations', p. 26.

the activity of private adventurers seeking individual profit. This issue once discussed in Cornwall but never went further confronting very strong voices against it. 42

On publication of *the Report*, a petition to the Government was made by the Joint Industrial Council for Tin Industry in Cornwall asking for financial assistance to Cornish mines. To avoid infringing a principle of the Government policy not to give public money to private enterprises the petition was designed for the Joint Council itself instead of individual mines to be a receiver of the grant from the Government. The petition to the Board of Trade consisted of three requests shown below. 43

- (1) The Board of Trade should approach the Development Commission with a request for a grant of £200,000 to be expended over a period of two years on a definite development programme.
- (2) The grant to be made to the Industrial Council and expended under the supervision of that body on the understanding that it is not to be advanced to any mines for private profit but only for new development.
- (3) (The grant) to be repaid by the mines out of any profits arising through the development carried out by means of this expenditure.

The attitude of the President of the Board of Trade, Robert Horne, to the application was not positive for the following reasons.⁴⁴

- (1) The Commissioners of the Fund are advised to interpret the 1909 Act strictly and mining would therefore appear to be excluded.
- (2) Even if the grant is made to the Industrial Council which is not a body for profit, they would allocate the money to mines according to the ability of their schemes to repay the grant out of their profits once realised. This means that the grant eventually would become the assistance to profit seeking private companies. It is infringement of the principle. Even if the grant were made to private schemes, it would be advised for schemes to be chosen and carried out under the direct and close supervision of the Board of Trade (not by the private Joint Industrial Council).
- (3) As the fundamental question mining is speculative and, therefore, under the tight financial conditions of the British Government, it is not advised for public money to be spent in such industry even if we understand its importance for the nation.
- (4) As for the national security, British production is too small to meet the whole demand of British industries.
- (5) If the principle of State assistance be established for the tin mining industry, it would be very difficult to refuse to extend it to other industries.

In the Parliament in reply to the question whether any steps were taken in accordance with *the Report* or any action to protect the industry was in consideration, Bridgeman, newly promoted the Secretary for Mines, said as follows, while admitting the difficult situation of Cornish mining.⁴⁵

⁴² Corn., 6 Oct. 1920, p. 2.

 $^{^{43}}$ Applications for Assistance for Tin and Wolfram Mining, Memorandum by the President of the Board of Trade, CAB/24/107.

⁴⁴ CAB/24/107.

⁴⁵ Hansard, 1 Jul. 1920, vol. 131, cc. 672-3.

District	Male	Female	Boy	Girl	Sub-Total
Redruth	1,284	91	123	19	1,517
Camborne	1,248	277	72	34	1,631
St. Just	402	33	1	0	436
Other Districts	3,352	146	98	20	3,616
Total	6,286	547	294	73	7,200

Table 1 Number of Unemployment by District (May 1921)

Aggregated figures for districts other than major mining areas are shown in Other Districts. Source: *Cornishman*, 11 May 1921, p. 2

As regards the suggestion that control should be re-established and the importation of tin prohibited, such a course would be ill-advised in the case of an important raw material produced largely within the British Empire, on which other and larger trade depend, and of which the whole production is not likely in the most favourable circumstances to meet more than a faction of the home demand.

After receiving of the official reply there was strong dissatisfaction with the decision in Cornwall. Closure of Wheal Grenville was followed by that of Dolcoath Mine which had been a token of the prosperity of Cornish mining for many years. In early 1921 Tincroft Mine was closed down. The February South Crofty and East Pool suspended production and continued only pumping and maintenance work. The deep part of engine shaft in East Pool section collapsed in May 1921, which caused havoc for fear of flooding all Redruth and Camborne mining district. Among major mines in Cornwall only relatively small Giew Mine was working. Cornish mining was indeed on the verge of dying. Table 1 shows the unemployment figures by district in May 1921. Out of 7,200 unemployment people in the whole county major mining districts, Redruth-Camborne and St. Just accounted for about 3,600.

As the position of Cornish tin mining was getting worse, the Industrial Council, local governments, and local people through local M.P.s made application for aid to the Government. But the results were not fruitful. When asked by J. Wignall, M.P. for the Forest of Dean, Bridgeman replied to the question as below.⁵⁰

I am aware of the unfortunate position in Cornwall as stated by the hon. Member. The matter has had made my careful consideration, but I fear no action which it is within my power to take is likely to help the industry to recover. The position is due to economic factors, and revival depends upon an improvement in the price of tin (which is now approximately what it was before the War) or upon reduction of costs of production, or both.

⁴⁶ Corn., 7 Jul. 1920, p. 7.

⁴⁷Some 250 miners became unemployed. Corn., 19 Jan. 1921, p. 6.

⁴⁸In total about 1,000 miners became out of work in both mines. Corn., 23 Feb. 1921, p. 7.

⁴⁹Heffer, East Pool, pp. 36-7; Corn., 25 May 1921, p. 3; 3 Aug. 1921, p. 72.

⁵⁰ Hansard, 21 Feb. 1921, vol. 138, c. 517.

To the M.P.'s next question about any hope of the Government adopting any of the recommendations of the Committee, 'because there are other causes than the economic by which the conditions could be improved.' Bridgeman answered, 'I shall be glad to consider any schemes which those interested in the industry can bring forward for working it more economically.'

Attributing the unfortunate position to economic factors; the relations between price and cost, intervention in the market by giving aid to mines was rejected. This same logic was repeated by the Prime Minister, Lloyd George in replying to the letter sent by the St. Just Unemployment Committee.⁵¹

Some brighter prospects came with Trade Facilities Act (TFA) of 1921.⁵² In answering to questions made by Francis Acland M.P.; (1) the possibility of diverting the relief being paid to the unemployment to economic and industrial use by setting the men to work in the mines, (2) any hope of being able to assist in any way, by loan or grant, any amalgamation scheme of development on behalf of the distressed mining industry in Cornwall, Bridgeman said as follows.⁵³

The Government are opposed to any policy of subsidising industry on the ground that conditions of economic trading are the only sound basis for regaining national prosperity. The only form of assistance that provided by the TFA, and the question whether any scheme should be granted is a question for the Advisory Committee under the Act.

While restating the principle of the policy, he suggested the use of the newly established Act which aimed to facilitate the reconstruction of economic infrastructure.

Some schemes succeeded in receiving the loan guaranteed by the Treasury in 1922; £30,000 for pumping water facilities in South Crofty, £10,000 for improving dressing plant in Levant, £25,000 for re-opening Tresavean, and £50,000 (later increased to £65,000) for new development scheme of Roskear section in Dolcoath. ⁵⁴ While South Crofty did not appear to need the loan to such amount actually, ⁵⁵ Dolcoath desperately needed the loan for the £120,000 development scheme. ⁵⁶ The latter faced difficulty to raise the rest of money later. However small the loan was, it was the first assistance given by the Government to Cornish mining. The morale of local people was getting high. Coupled with the recovery in the price of tin, by the end of 1922 some optimistic articles appeared in the local newspaper. In 1923 new development and operation work in such mines as East Pool, South Crofty, and Geevor started. Cornish mining seemed to be in process of steady recovery. Captain Algernon Moreing M.P. expressed as such, 'the crisis through which that (tin) industry has just been passing' in his question to the President of the Board of Trade about the action of his department during the crisis. ⁵⁷

⁵¹ WMN., 11 Oct. 1921, p. 3.

⁵²Hansard, 25 Oct. 1921, vol. 147, cc. 723-4; For the role of the Act, see Cerretano, 'The Treasury.'

⁵³ Hansard, 6 Apr. 1922, vol. 152, cc. 2448-9.

⁵⁴BPP, Trade Facilities Act, 1921, Statement of Government which the Treasury have stated their willingness to give up 30 June, 1922, 1922 (121); up to 30 September, 1922, 1922 Sess. II (3); up to 31 December, 1922, 1923 (4); up to 30 June, 1923, 1923 (95).

⁵⁵ Corn., 31 May 1922, p. 7.

 $^{^{56}}WMN$., 18 Oct 1923, p. 3; 21 Feb 1923, p. 3; Corn., 4 Apr. 1923, p. 5; 2 May 1923 Supplement, p. 9; 17 Oct 1923, p. 3 and so on.

⁵⁷ Hansard, 24 July 1923, vol. 167, c. 352.

II-3 Recovery and Prosperity 1924-28.

The year of 1924 began with brighter outlook in Cornwall than previous years. The price of tin improved drastically from £182 to £240 in 1923 owing to the recovery in the demand for tin, particularly in the U.S. while the supply from Malay and NEI stagnated, which appeared to justify an expectation of exhaustion of tin in the East. Operation and development work aided by the TFA loan was in progress in Tresavean and Dolcoath. And the development in Geevor looked promising. South Crofty and East Pool restarted paying dividends. By the end of 1924 the number of unemployed in Camborne and Redruth district which had amounted to 3,114 at the end of 1921 reduced to 1,320, though still high in the absolute term.

As shown in Figure 2 the upward trend of price of tin continued until the early 1927 with a short break in May 1926 when the General Strike took place. Though the coal miners' strike continued till November in the year and operation in some tin mines were disrupted due to the shortage of coal, ⁶¹ in general, the hindrances caused by the strike seemed to be confined. ⁶² Cornish people were delighted to hear the news of new investment into this area from London. In 1925 Howeson's Anglo-Oriental (Tin Selection Trust) decided, in addition to two other mines which they already had in Cornwall, to re-organise and restart old Wheal Kitty at St. Agnes with the nominal capital of £125,000 in 500,000 shares. In January 1926 this mine successfully raised capital of £85,000. ⁶³ These three Anglo-Oriental mines in Cornwall employed 756 persons in total in 1928. ⁶⁴ Old mines which had been closed down because of high cost with old technique appeared to revive with new technique and equipment under the favourable market conditions. ⁶⁵ This was the universal reason for attracting new investment. In general, heavy investment in surface equipment was made. In 1926 and the early 1927 Cornish mining enjoyed the most, and the last, prosperous time after the War under the tin price at over £300 per ton. ⁶⁶

The price of tin, after marked the highest in March 1927 turned into downward trend in the mid-1927 though it still fluctuate in the range of £220–260. In most of 1928 price moved oddly not by accurately reflecting visible supply; when visible supply was tight, price dropped down and when ample, price rose. Some attributed this movement to speculative transaction by Anglo-Oriental.⁶⁷ But we can safely say that 1928 saw unstable price fluctuations. For Cornish mining the price range of £260–275 was regarded as the favourable one to attract outside capital and to explore new deposit. As will be discussed later, they basically supported Howeson who was working for the combining tin producers worldwide to stabilise the price of tin. There were Cornish investors into Malayan mines which did not gain benefit so much by the combination, therefore, to some extent complicated interests existed in the local society.⁶⁸ But most major mines in Cornwall joined above mentioned TPA in July 1929.

⁵⁸ WMN., 2 Jan. 1924, p. 7; 12 Feb. 1924, p. 9; 19 Feb. 1924, p. 5.

⁵⁹ SEYB., for 1927.

⁶⁰ WMN., 30 Dec. 1924, p. 8; Corn., 31 Dec. 1924, p. 5.

⁶¹Geevor Mine suspended the operation due to the shortage of coal. WMN., 15 May 1926, p. 9.

⁶² WMN., 9 Oct. 1926, p. 7.

⁶³ SEYB., for 1927. Western Daily Press (Bristol), 11 Jan. 1926.

⁶⁴Calculated from Burt, *Mining* each year.

⁶⁵This kind of remarks represented by R. Pawl, the director of Wheal Kitty gave confidence in the future of Cornish mining. *WMN*., 14 Jan 1926, p. 8; *Corn.*, 20 Jan. 1926, p. 5.

⁶⁶Optimistic views were expressed in local newspapers. eg., WMN., 25 Feb. 1926, p. 7; 23 Oct. 1926, p. 8; 11 Nov. 1926, p. 3 and so on.

⁶⁷ Hillman, The International Tin, pp. 89-90.

⁶⁸C. V. Thomas, 'Obstacles to a Stabilised Price', originally appeared in *Mining World*, quoted in *Corn.*, 28 Dec. 1927. p. 5.

II-4 Great Depression 1929-31.

By the establishment of TPA, the price of tin once recovered above the £200 level in the summer of 1929 but soon turned into downward trend to the £100 level by the end of 1930 with the severe economic depression in the world, particularly in the U.S. Closure of Cornish mines continued. Hopes of Cornish mining rapidly diminished with the closure of Anglo-Oriental mines due to heavy capital cost⁶⁹ and the failure of Roskear project in Dolcoath which could not raise enough capital to continue the development.⁷⁰ In October 1930 Geevor and South Crofty mines suspended mining operation except maintenance work.⁷¹ Consequently only East Pool Mine was operating with reducing shifts from three to one in 1931.⁷² Accordingly the number of unemployment in the mining districts soared. Registered unemployment of miners increased to over 1,000 by the beginning of 1930.⁷³ The establishment of the International Tin Control Scheme effective from the first of March 1931 gave hope to Cornish people but its benefits were not felt in Cornwall immediately. The position of Cornwall was again on the verge of dying of low price of tin in 1930–1.

Confronting the difficult environment, Cornish mines applied for state aid to carry out the revival scheme in Camborne and Redruth mining district which consisted of renovating and extending so-called Dolcoath Deep Adit. The deputation met the Lord Privy Seal, J. H. Thomas, in February 1930 saying that this scheme was the most effective and productive way to reduce unemployment. Thomas promised to forward the application to the Treasury.⁷⁴ In spite of this nothing notable happened and the situation was getting worse and worse. As other metalliferous mining, particularly iron mining, was in depressed situation too, the Secretary for Mines, Manny Shinwell, called the Advisory Committee for the Metalliferous Mining and Quarrying Industry (hereinafter the Advisory Committee), which had been inactive for some years, to 'inquire into possibilities of developing or of reviving the working of metalliferous and associate deposits in Great Britain.'75 At the first meeting of the committee in September 1930 it was decided that two sub-committees; one for iron ore and ironstone deposits and the other for non-ferrous and associated minerals, should be formed under the committee. ⁷⁶ The latter sub-committee under the chairmanship of R. A. Thomas ⁷⁷ held seven meetings till July 1931. In June 1931 some members of the sub-committee interviewed with representatives of the Joint Committee of the Cornish Chamber of Mines and Cornish Institutes of Mining Engineers at South Crofty Mine. They discussed on the above mentioned Dolcoath Deep Adit Scheme or Cornish Scheme, which was drafted by the Joint Committee and produced to the Lord Privy Seal in the previous year.⁷⁸ The sub-committee proposed to widen the adit in the original plan so that it would have capacity for conveying ores as well as draining the water.⁷⁹ This revised scheme was adopted by the Advisory Committee⁸⁰ and recommended in the Committee's Report which was basically

⁶⁹ Corn., 21 Aug. 1930, p. 5; 28 Aug. 1930, p. 5; 11 Sep. 1930, p. 5.

⁷⁰ WMN., 24 Jul. 1929, p. 3; Corn., 8 Aug. 1929, p. 5.

⁷¹Corn., 21 Oct 1930, p. 5.

⁷² WMN., 12 Nov. 1930, p. 9.

⁷³ Hansard, 16 December, 1929, vol. 233, c. 999w; 30 April 1930, vol. 238, c. 187.

⁷⁴ WMN., 13 Feb. 1930, p. 9; Hansard, 25 February, 1930, vol. 235, cc. 2021–2.

⁷⁵ Hansard, 27 July, 1931, vol. 255, cc. 2062-3.

⁷⁶The Report of the Advisory Committee, 127.

⁷⁷After the death of the first chairman, J.J. Burton in November 1930.

⁷⁸The Report of the Advisory Committee, Appendix 1, 'a Mining Scheme for Cornwall', original version can be found in 'Minutes of Meetings', POWE22/56; 26/215.

 $^{^{79} \}text{Correspondence}$ between the secretary for the sub-committee and the Cornish Chamber of Mines, 27 June and 2 July 1931. POWE22/54.

⁸⁰ Minutes of the 11th meeting, 15 Jul. 1931, POWE22/56.

tinted by the colour of 'tin famine' argument.⁸¹ But the report was not necessarily accepted unanimously by committee members. There were strong opposition to spend public money on such scheme. Therefore, the report published in 1932, one year after the committee's resolution, had the following minority opinion by three committee members; C. Cookson (representing non-ferrous metal trade), A. Hibbert (representing owners of iron ore mine) and H. Luis (an economic geologist).⁸²

The general tone of the report as to the future prospects of non-ferrous metalliferous mining appears to us to be unduly optimistic, being based apparently rather on possibilities than on ascertained facts; we,, do therefore not endorse the view that public money should be spent upon any scheme offering uncertain prospects.

The report recommended some financial assistance to the Cornish Scheme, 83 but no notable measures were taken. In reply to R. A. Thomas who asked for some action as the chairman of the committee and also on behalf of the Cornish Chamber of Mines immediately after the publication of the report, E. Archer, the secretary for the committee, said that it was not the time to take any action considering the overall financial situation.⁸⁴ The Cornish Chamber of Mines again asked to the Department of Mines for assistance. But the answer was negative, saying that from the engineering point of view merits of the scheme were not questioned but the Secretary for Mines could not find justification to finance the project from public money. And it was followed by 'if it had good commercial prospect, there should be opportunities of financing it from private sources.'85 Quoting the accompanied opinion of reservation by three members of the committee, this answer repeated in the reply letter from the Secretary for Mines to P. G. Agnew, M.P. who asked about the current situation of implementation of recommendations made in the report in August 1933. 86 Even in 1935 this attitude did not change in the reply to the employment committee in Camborne and Redruth. 87 Consequently no measures were taken to pursue the Dolcoath Deep Adit scheme at all.

II-5 Recovery in the Controlled Market and a Sign of Despair 1932-38.

While the debate on financial assistance continued, market conditions became to show some improvement owing to the International Tin Control Scheme. Under these improved conditions South Crofty and Geevor restarted mining as early as the end of 1931. Recovery of price of tin from 1932 shown in Figure 2 gave some confidence in Cornish mining. At the renewal of the international control scheme in 1934, having been invited to join the second scheme, Cornish mines claimed for rather optimistic production quota to the international committee which was originally targeting for rather smaller quota for Cornwall. As already seen, the difference was settled with the gentlemen's agreement between the committee

⁸¹ The Report of the Advisory Committee, paragraph 22-32.

⁸² The Report of the Advisory Committee, p. 22.

⁸³ The Report of the Advisory Committee, 'Summary of Recommendations No. 13.'

⁸⁴ Archer, the secretary of the committee, to R. A. Thomas, 16 Aug. 1932, POWE 26/215.

⁸⁵Correspondence between Cornish Chamber of Mines and Department of Mines, 4 Mar. 1933, 13 Apr. 1933, POWE 22/56.

⁸⁶Department of Mines to Agnew, 3 Aug 1933, POWE 22/5.

^{87&#}x27;Note on the position of Camborne-Redruth tunnel proposal', Department of Mines to Ministry of Labour, 28 February 1935, POWE 22/56.

⁸⁸ Corn., 1 Oct. 1931, p. 5.

and three major productive mines.89

Though the annual highest price of tin touched the £300 level in 1937, the annual average prices in the years of 1933–35 moved within the range of £200–50. This trend attracted some debates. Weber-Brown of Wheal Reeth insisted that a guaranteed price, say over £200 realised during those years, was essential to continue mining in Cornwall which was important from the viewpoint of national security. In reply, the Secretary for Mines and the Defence Coordination Minister told him that more priority should be given to the renewal of the international control scheme rather than to the unilateral guarantee of the price which might eventually become subsidy to the domestic mining, which would hamper in reaching international agreement. Furthermore they said that Cornish production was too small to support the needs of tin consuming industries. This was the common opinion among the Department of Mines and Defence Coordination Ministry. As the promoter of the international control scheme the Colonial Office was on this side too by nature.

In 1938 at the catastrophic fall in the price of tin Cornish people again asked for the guaranteed price to continue mining to the Defence Coordination Minister, Thomas-Inskip, as tin appeared to become one of the strategic minerals in the time of war. He replied that the subsidy only considered on the strongest ground of defence interest and small fragment production in Cornwall never satisfied this requirement. National security became the main reason for claim for the subsidy but the Government never considered that Cornish tin was in this position. John Campbell, an economic adviser to the Colonial Office and the chairman of the International Tin Committee (ITC) said that no obstacles for the Government to give grant to Cornish mining would be found because Cornwall was not participants in the scheme, but if the British Government took some measures to assist Cornish mining financially, the Government would face very difficult situation politically because they were asking, on the other hand, Malayan and Nigerian producers to observe the scheme and restrict production. In 1938 a sign of despair was clearly reaching Cornish mining.

III Actions and Attitude of Cornish Mining in the Changing Market Environment.

Though there are overlaps in some parts described in the previous section, actions taken by Cornish mines for tiding over the depressed market and general attitude to the changing environment are examined. As high tin price was the essential factor for marginal mines to survive, their attitude to an effort to intervene in the market to keep the price stable and above certain level was generally favourable. They also preferred market intervention by the Government by providing with some aid to mining sector. In fact, they made every effort to secure the measures to keep the price high. Combination of tin producers in the market and subsidy by the Governmental to the industry were two major hopes in the region.

⁸⁹ Hillman, The International Tin, pp. 174-5.

⁹⁰Financial Times, 29 Jun. 1936; Weber-Brown wrote a note of future on the future of Cornish mining and handed to Department of Mine in February 1936, POWE 22/60.

⁹¹ Crookshank (Secretary for Mines) to Weber-Brown, 18 Jul. 1936, POWE 22/60.

⁹² Minutes Sheet written by Nott-Bower, 13 Jul. 1936, POWE 22/60.

⁹³ Correspondence between J. Campbell (ITC) and Nott-Bower, 6 and 9 Jul. 1936, POWE 22/60.

⁹⁴Thomas Salt (Amari Mines) to Thomas-Inskip, 1 April 1938, CO 852/140/4.

⁹⁵Thomas-Inskip to Agnew, 12 Apr. 1938, CO 852/140/4.

⁹⁶ Campbell to Department of Mines, 8 Apr. 1938, CO 852/140/4.

III-1 Combination or Cartelisation.

III-1-a Bandoeng Pool in 1921.

As Hillman introduced in his book, many works have been written on Bandoeng Pool which was initiated by W. F. Nutt of Strait Trading Company. It pooled 19,700 tons of tin in the East in 1921 and gradually liquidated them from the mid-1923 onwards when the price of tin showed the sign of recovery. Questions as to whether it distorted the market function and caused violent fluctuation in tin price in the latter half of 1920s are the focal point of discussion. Indifferent to this controversy, we can safely say that the pool contributed to some extent to maintain the price in the depressed market. Therefore, it was welcomed by mining people in Cornwall.

III-1-b Tin Producers' Association in 1929.

Discussion for forming producers' association itself had a long history since the War. 100 But facing unstable price fluctuation after the recorded peak in March 1927, as stated above, the discussion on the possibilities to make combined effort to stabilise the price began in October 1927 when British and Dutch interests as producers and American interests as consumers held a meeting. A local newspaper reported this move as '(the discussion) has now been brought to an advanced level' and 'Producers' Association to be formed.' 101

Though it was not smooth way in forming the association, as stated before, in July 1929 TPA was established to show the solidarity of British producers in Malaya, Nigeria, Australia and Cornwall to NEI and Bolivian counterparts. Mines in Cornwall became an original member of the council of the association. Under the recognition of the situation as an excess-supply the association tried to retain the tin stock at smelters at first then to curtail the production on voluntary base. Cornish mines participated in the reduction scheme. Cornish mining welcomed the formation of the association but in order to curtail the production compulsorily an international agreement was needed. A Cornish paper sent 'Good Luck' message to Howeson when he went to negotiate with NEI and Bolivian producers in December 1929. The end of 1930 an agreement reached to form the International Tin Price Control Scheme 105 and to be effective after the relevant legal procedure mainly taken by British Government. On the 1st January 1931 a local newspaper highlighted the article of the news as 'At Last! The Good Tin News Confirmed; World Control and a Better Price' and 'a New Year Gift.'

III-1-c International Tin Control Scheme from 1931.

Though Cornwall itself did not participate in the Scheme, it was welcomed in general in spite of the fact that curtailing the production sometimes meant the closure of mines in the

⁹⁷Yip, *The Development*, pp. 155-6; Tregonning, *Straits*, p. 41; Hillman, 'Bandoeng', pp. 24-5.; *Corn.*, 14 May 1924, p. 5.

⁹⁸Rowe, *Markets*, pp. 158-9; Eastham, 'Rationalization', pp. 18-21; Davis, 'Under Intergovernmental', pp. 194-5; Knorr, *Tin*, pp. 73-9. Hillman summarised these arguments in his 'Bandoeng', pp. 17-8.

⁹⁹ Corn., 23 Jan. 1924, p. 5; 13 Feb. 1924, p. 5; 14 May 1934, p. 5 and so on.

¹⁰⁰ H. Thomas was one of the strong advocates for a producers association. eg., Corn., 13 Feb. 1924, p. 5.

¹⁰¹ Courier and Advertiser, 18 Oct. 1927, p. 7.

¹⁰² Corn., 18 Jul. 1929, pp. 5, 7.

 $^{^{\}rm 103}$ Hillman, The International Tin, pp. 102–3; Corn., 2 Jan. 1930, p. 5.

¹⁰⁴ Corn., 12 Dec. 1929, p. 6.

¹⁰⁵ WMN., 31 Dec. 1930, p. 9.

¹⁰⁶ Corn., 1 Jan. 1931, p. 5.

region.¹⁰⁷ For the renewal of the scheme ITC wanted Cornwall to join the second scheme in order to have the scheme more comprehensive and the negotiation of quota took place in 1933. ITC at first showed the quota of 1,800 tons taking Cornish output of 1,500–1,600 tons in those years into account. But the Cornish Chamber of Mines did not agree with ITC expecting the good prospect of tin market. An agreement appeared to reach at 2,200 tons once but discontent remained. In consequence, major mines; East Pool, South Crofty, and Geevor reached individually 'Gentlemen's Agreement' with ITC to settle the quota at 1,700 tons in total for those mines in July 1934.¹⁰⁸ Apparently by preventing further fall in price the scheme benefited Cornwall during the depressed years and a local newspaper wrote, 'ITC saved the (Cornish) industry.'¹⁰⁹ Even after the prosecution for his mal-transaction in pepper and shellac trade, Howeson who was the powerful advocate for the scheme was regarded as 'one of the best and ablest contributors to tin mining prosperity' in a newspaper.¹¹⁰

III-1-d Opposition against Control among Cornish Investors.

While the attitude of mines in Cornwall was generally favourable to the international tin price control, there were complicated circumstances in Cornwall. That is the existence of Malayan interest represented by Cornish investors in mines in Malaya. Over 8,000 tons of tin were produced in Malaya by Cornwall originated mines in 1929.¹¹¹ Among them the Redruth Group led by W. R. H. Chappel and later F. E. Mair, and Tronoh Group led by C. V. Thomas were dominant. They were low cost producers, some of which were able to make profit even when tin price was around at £100 in contrast with the Cornish mines' break-even point at well over £200.¹¹² Though they participated in the scheme, their attitude to the scheme was not so positive. Indeed they were particularly negative to the uniform reduction by allotting quota to member countries. As early as in October 1927, C. V. Thomas, a strong advocate for Cornish interest but, at the same time the chairman of one of most productive mining groups in Malaya indicated the difficulty of combination to keep the price, quoting remarks by two people in his article in the Mining World; Byrne, as a keen supporter for the combination and Chappel, as an opponent. 113 Thomas himself was in a delicate position, on the one hand he wanted the price became stable but, on the other hand, was not so keen for the price to be controlled by a strong body. He in fact later said to a newspaper 'the age toward decontrolling', which caused some confusion in the region as he had been regarded as a strong supporter for the control.¹¹⁴

After the death of Chappel, Mair became a strong opponent to the control scheme, saying that the reduction of production should be made by closure of non-profitable mines (high cost mines) by the market function, not by imposing uniform reduction which compelled profitable mines to curtail their production. To this argument Herbert Thomas, the Managing Editor of *Cornishman*, hit back strongly saying that, while admitting the fact that profits made by Malayan mines eventually would come back to Cornwall as dividends and benefit the region financially, none other than Malayan mines were responsible for closure

^{107 &#}x27;For and Against Tin Control; How Cornwall may win or lose', Corn., 8 Jan. 1931, p. 5.

¹⁰⁸ Hillman, The International Tin, pp. 174-5; Nott-Bower to Weber-Brown, 28 Feb. 1936, POWE 22/60.

¹⁰⁹ Corn., 10 May 1934, p. 8.

¹¹⁰ Corn., 2 Jan. 1936, p. 5.

¹¹¹ Hillman, The International Tin, p. 86.

¹¹² James, 'Tin Prices', pp. 222-3.

¹¹³ Corn., 28 Dec. 1027, p. 5.

¹¹⁴ 'Should Tin be Decontrolled', *Corn.*, 22 Mar. 1934, p. 3; His position was questioned in Weber-Brown's note and a letter from Nott-Bower to Campbell of 2 Mar. 1936 comparing with his brother R. A Thomas who was an eager supporter for the control. POWE 22/60.

of Cornish mines. When the process for the control was making progress in 1930 he entitled his open letter to Mair as 'Scuttling the Tin ship; will "dissension" benefit anybody?' He was an enthusiastic advocate for combination to argue against *laissez-faire* quoting the cases of big capital in copper and other industries.¹¹⁵

The Free Trade argument is a palpable absurdity. Why should producers not combine to avoid almost universal losses due to cut-throat competition! What is the real difference between companies having 60 or 70 million of capital and producing both raw material and the finished article, and an International Association such as that formed to get fair treatment for Tin? If it is legitimate to amalgamate great copper, oil, soap, chemical and other companies to avoid loss and stabilise profits, it is equally fair to stop cut-throat competition in the raising and marketing of Tin and so avoid waste of capital and conserve a wasting asset.

III-2 Hope for State Aid: Logic and Reasons of Both Sides.

There were two major occasions for Cornish mines to seek state aid eagerly; years of 1919–23 and those of 1930–33 though they always asked for some assistance to the Government throughout the period of observation. They also made appeal to the Government to settle the wage problem during the War. And in the late 1930s after the price control scheme started they also insisted the importance of domestic mining to be continued with some Governmental assistance from the viewpoint of national security. As mentioned above the years when the strong appeals were made to the Government corresponded with the years when the price of tin fluctuated violently within a year as shown in Figure 3. Except for 1920 the years also showed the drastic fall in tin price. As these facts clearly indicated, mines in Cornwall were much sensitive to the fluctuation of price as a marginal producer in the world.

The first major application ended with the TFA loans to some mines and the second appeal ended without concrete measures. To understand the reasons why the application for state aid ended without remarkable success despite their intense effort, the logic or reasons insisted by Cornwall and the logic or reasons in response made by the Government are investigated.

III-2-a Cornish Logic.

To examine the logic or reasons which were claimed by Cornish mines when they applied for state aid, it will be appropriate to quote a typical, though, to some extent, emotional, claim made by above appeared Herbert Thomas. He wrote an article in his paper entitled, 'Why Cornish miners should be helped – Twenty Good Reasons' in December 1921. In this he described 20 reasons summarised below. 117

From reasons 1 to 5 he at first listed 'exemplary conduct' of Cornish miners by being consent to a reduction of wages to keep mines going in spite of their low wages and no subsidy from the Government during the War.

Then from 6 to 14 he put stress on unfair treatment compared with coal industry. The Government subsidised coal mining, which eventually led rise in fuel cost in Cornish mines and compelled them to close the mines. Tin miners were competing against coolie labour

¹¹⁵ Corn., 1 Jan. 1931, p. 5.

¹¹⁶ See footnotes, 26 and 27.

¹¹⁷ Corn., 7 Dec. 1921, p. 5.

or native labour cheaply available in Malaya, Nigeria, and Bolivia and this competition was inevitably causing low wages for Cornish miners in comparison with those for coal miners. A million of coal miners and their dependents had a loud voice to protect their job and interests but Cornish miners had not. During the War the Government supported coal price to keep coal mining going on, but, on the contrary, restricted upward movement of tin price so that American industry could have the metal at low cost. If there had not been the restriction, Cornish mines would have received £500,000 more during the War which was sufficient to tide over the depression immediately after the War.

From 15 to 16 he wrote that unemployment of miners was increasing and they and their families lived on the Labour Exchange dole and private donations. This in turn became an extremely heavy burden to the local authorities.

From 17 to 19 he insisted that the Government turned a deaf ear to Cornish miners' claims, on the ground that unemployment was general in the country, and Alfred Mond, Minister of Health, told that unless the mines soon re-opened, the Government would have to seriously consider the removal of the miners to some area not necessarily outside England, where their skill could be utilised. As those remarks were taken sensationally as the Governmental plan of emigration, his Parliamentary Secretary later denied the intention for moving miners to somewhere and explained that the remarks only meant the expectation of economic revival based on the law of supply and demand in human resources. But there was nowhere for tin miners to go both inside and outside of the country under the contemporary economic conditions. He suggested that instead of unproductive dole paid to unemployed miners the Government aid to the industry would truly create employment and bring a hope for the revival of mining industry. It would be the productive way in use of public money.

And the last, he quoted Cornish miner not as a man but 'a national treasure.' Cornish mining had been the nursery of miners from which many excellent mining men in the world came. Cornish miners made a valuable contribution to the War in digging trenches and so on, and domestic supply of tin would be essential in the contemporary trade conditions. From these strategic points of view the loss of the industry would mean the loss of national treasure.

In his remarks four set of major keywords listed below are pointed out. These were continuously appeared in every application for state aid throughout the period though the stress of claims differed slightly reflecting the nature of the problem for the particular year. Both in *the Report* of 1920 and the Advisory Committee report of 1932 these claims were also adopted and repeated too. In this sense the both reports were written for the Cornish advantage.

- i. Compensation for the damages caused by the Government during the War.
- ii. Fair treatment especially in comparison with coal mining.
- iii. Not the dole but the subsidy to the industry.
- iv. Imminent 'Tin Famine' and the national security.

Each point is examined briefly.

i. Compensation for the damages caused by the Government action during the War.

They believed that no special compensation had been made for their sacrificing development work due to massive recruitment of miners to the War. And further the damage caused by the restriction of tin price in 1918 was strongly condemned. As early as in October

1918 the damage caused by the restriction of tin price was criticised by the representatives of miners and employers when the Committee on Production interviewed with them for the arbitration of wages. ¹¹⁸ In Cornwall it was believed that the Government sold tin cheaply for obtaining copper form America, in other words, the Government sacrificed Cornish tin for American copper, though the Government never officially admitted the existence of an agreement for copper. ¹¹⁹ There were strong feelings in Cornwall that they were entitled to receive grants in compensation of this. Even more than 10 years later this logic was used in the writings to urge the Government to assist mining in Cornwall. ¹²⁰

ii. Fair treatment especially in comparison with coal mining.

As already shown in the Figure 5, during the War the price of coal in real terms moved steadily comparing with that of tin which pursued basically downward trend except for 1918. During the inter-war period, especially toward 1926, the issue of coal mining was one of the focal points in British politics. As the effect of coal mining disputes was tremendously big, every effort to calm down the disputes took place. In contrast, though there were some labour disputes in Cornish mining, this kind of issue in non-ferrous metal mining was seldom discussed politically. Their influence to other industries was quite limited due to their size. But for Cornish people it looked 'unfair' within the mining industry. Maintaining wages high for coal miners needed to keep the coal price high by policy. Then high coal price meant high fuel cost in Cornish mines. Thus Herbert Thomas wrote this wage-price-cost chain as 'Cornish tin is paying part of the high wages of the coal miner and so taking it out of the pockets of the tin miner and the Cornish shareholders.' Apart from the question as to whether this argument is correct or not it is right to say that there was a feeling of unfairness among Cornish people.

iii. Not the dole but the subsidy to the industry.

Mining people in Cornwall continuously insisted that the nature of the money given to them should be spent for reviving and promoting the industry. And once it achieved the money should be repaid out of profit. Therefore, it would be a kind of investment which would create employment unlike the dole which was consumed to maintain the household of unemployed people. Immediately after the War the stress was put on the fund for tiding over the after-War depression but as unemployment increased the purpose of money gradually changed to create the employment for the remedy of unemployment. Even so 'not the dole but the subsidy to the industry' was insisted. Possibilities to redirect the money paid as the dole to the subsidy to the industry were often asked. The measure for the Government to buy up tin when the price fell down below the certain level, in other words, guaranteed price policy was discussed as another kind of subsidy to the industry. This argument had an origin immediately after the War¹²⁴ but was repeatedly insisted in the 1930s. 125

¹¹⁸ Corn., 30 Oct. 1918, p. 7.

¹¹⁹ Hansard, 2 March 1920, vol. 126, c. 280w.

¹²⁰ Report of the Advisory Committee, Appendix1; Original draft POWE 22/56, 22/215.

¹²¹ Supple, History of the British Coal Industry, Chap. 3-4.

¹²² Corn., 30 Oct. 1918, p. 5.

¹²³ eg., Hansard, 16 February 1922, vol. 150, c. 1231; 7 March 1922, vol. 151, c. 1071; Report of the Advisory Committee, Appendix 1.

¹²⁴ eg., 'An Open Letter to Sir Auckland Geddes', Corn., 11 Jun. 1919, p. 2.

¹²⁵ eg., Weber-Brown's argument in 1936, Corn., 30 Jul. 1936, p. 5.

vi. Imminent 'tin famine' and the national security.

Before Jones book,¹²⁶ as early as the beginning of 1920s the notion that alluvial tin deposit in the East would exhaust in not so distant future was in circulation.¹²⁷ Therefore, *the Report* of 1920 was written, in its general tone, based on this theory and the importance of securing domestic tin was mentioned in it. The Advisory Committee in 1930 also based on the theory even after it was proven that the exhaustion would not be imminent.¹²⁸ As the world was moving toward the war in the mid-1930s, the security reason was put stress on the continuation of Cornish mining. In 1936 Weber-Brown asked for the guaranteed price of tin under which Cornish mining was able to operate for the security of nation. He sent the letter of the same contents to *the Financial Times* to make people aware of the importance of domestic supply of the strategic commodity. The reply from Harry Crookshank, the Secretary for Mines, was negative. Again in 1938, preservation of Cornish mining was insisted by Agnew M. P. but it did not succeed.¹²⁹

III-2-b Logic of the Government.

Facing continuous claims for state assistance from Cornwall, the Government replied each time to them. As emphasised points of the claims differed slightly time to time, the replies from the Government also differed accordingly. But below cited five set of keywords are in common among the replies.

- i. Economic factors; the law of demand and supply, as the fundamental causes of depression.
- ii. No subsidy from public money to the private enterprises.
- Fragment production in terms of the whole British Empire; Cornish tin never meets the demand.
- iv. Lack of Unity among Cornish Mines.
- v. Chain effect to other industries.

Each point briefly examined below.

i. Economic factors as the fundamental causes of depression.

The depression arose from uncontrollable economic factors, mainly a mismatch between demand and supply, and, therefore, recovery of economy would be the only and fundamental solution for it. This logic was frequently used in the Government's replies especially in the early 1920s. ¹³⁰ As the time went on and the world was moving towards organised economy, that is, emergence of big capital, combination, and occasional intervention by the Government, this logic was still used but less frequently.

ii. No public money to the private enterprises.

As above mentioned, this logic was repeatedly used to reject applications. Knowing this, Cornish mining people worked out the plan to receive money jointly in 1920, but it was denied. In addition to this general principle, as Horne's memorandum indicated, there were

¹²⁶ Jones, Tinfields, p. vi.

¹²⁷ Hillman, The International Tin, pp. 56-60; Evidence given to the Departmental Committee by Cecil Budd, BT 329/7

¹²⁸ The Report of the Advisory Committee, paragraphs 22-32; Corn., 28 Dec. 1927, p. 5.

¹²⁹ Corn., 7 Apr. 1938, p. 5; 28 Apr. 1938, p. 2; Minutes of the meeting on 30 Jun. 1938, CO 852/140/4.

¹³⁰ eg., footnotes 48, 19 and 51.

feelings of distrust to non-ferrous metal mining for its speculative nature.¹³¹ Minority opinions, though they were not by the Government but committee members, attached to the Advisory Committee's report as shown above frankly expressed this.¹³² But for Cornish people this attitude of the Government was regarded as unfair treatment because the Government was pouring the money in the coal industry to calm down coal miners. As the only exception of this policy was the loan guaranteed by the Treasury based on the TFA made to four Cornish mines.

iii. Fragment production in terms of the whole British Empire; Cornish tin never meets the demand.

Every time Cornish mining society insisted the importance of continuation of Cornish mining from the viewpoints of national security or national interests. Also the reports of both Departmental Committee of 1920 and the Advisory Committee of 1932 backed this assertion. But, as already seen, the attitude to this claim of the Government was not so positive. The British Empire with its colonies and dominions was the far largest producer of tin in the world. From this fact Cornish production which occupied only 1 to 2% of the world production was negligible. Of course, the views among the ministries of the Government varied slightly reflecting their position; from rather understanding the Department of Mines to not so sympathetic the Colonial Office and the Ministry of Defence.¹³³ This attitude was typically expressed in the letter from Campbell to the Department of Mines in April 1938. 134 He wrote, 'in spite of recent comparatively high price over £200 since 1932 Cornish production moved around 2,000 tons level and never reached 3,000 tons. Apparently Cornish production is not able to meet the demand of British industries. Britain can secure the tin supply from the East, Nigeria and even from Bolivia with its naval power in case of emergency.' The speech by Earnest Brown quoted in the first section of this paper accurately reflected the position of the Department of Mines.

iv. Lack of unity among Cornish mines.

From the beginning of the inter-war period the Government appeared to seek a kind of combination or amalgamation of Cornish mines to solve the problem by joint effort. At a session of the Departmental Committee of 1920 C. A. Moreing gave evidence proposing the amalgamation of mines and *the Report* also included this suggestion. This issue was taken once in Cornwall but it never went beyond the discussion. At the pumping disputes in Camborne-Redruth district which was triggered by the collapse of the engine shaft in East Pool in 1921 and also in the preparation to make application for the TFA loan for solving drainage problem the possibilities of amalgamation were discussed but never achieved. When the Dolcoath Deep Adit Scheme or the Cornish Scheme was discussed in the subcommittee's first meeting in 1930, this issue was proposed by the Department of Mines but was soon turned down at the second meeting. This rather negative attitude to amalgamation, especially in Camborne-Redruth mines, was fully exploited by the Government in the

¹³¹ CAB 24/107.

¹³² See footnote 80.

¹³³ Minutes of the meeting, 30 Jun. 1938, CO 852/140/4.

¹³⁴ Campbell to Department of Mines, 8 Apr. 1938, CO 852/140/4.

¹³⁵ Amalgamation of mines in St. Agnes district and that of St. Just-Pendeen district were suggested. *The Report*, paragraph 48.

¹³⁶ Corn., 28 Dec. 1921, p. 2.

¹³⁷ Minutes of the meetings, POWE 22/56.

reason for not giving grants to the industry. ¹³⁸ The reason why Cornish mining people opposed combination or amalgamation and tended to be independent might be explained by the risky nature of the industry. Mining people tended to make investment in many independent mines to distribute the inherent risk of the non-ferrous metal mining; one mine's loss to be offset by the other's profit and each mining share moved separately according to their prospects. This question will be left to another research.

v. Chain effect to other industries.

If the Government admit, for tin mining, the exemption of the general principle for the public money not to give the private enterprises, they would lose the reasons to reject applications made by other industries. This logic was commonly found the documents within the Government throughout the period. But the Government poured money into coal industry and, as time went on, into other strategic industries but not in tin mining. This was taken by Cornish people as 'unfair' too.¹³⁹

IV Conclusion.

To conclude some issues are summed up.

Firstly Cornish mining people welcomed general tendency toward the market regulation, both by means of combination of world producers and by direct intervention in the market by the Government, though there were strong oppositions to combination from Cornish mining investors in Malaya. In this sense they were basically interventionist as a marginal producer to keep the tin price stable, but the fact that there were some complicated interests among them should also be taken account of. This situation was well illustrated in the article entitled 'What the "Buffer Stock Tin Pool" Means: The Problem from a Cornish Angle' by Herbert Thomas in his newspaper. He wrote, 'Cornwall's interest as a producing area is on the side of control and a good price for tin. Malay shareholders are not in the same boat, yet even they may find themselves safer as part of a fleet than trusting to their own craft to stand the buffeting of Atlantic and other gales.' Then he insisted that people, as an individual, can live without paying water-rate or electricity, but in a civilised country they have to share the cost for street lights for security reason.

Secondly, the Government continuously rejected direct intervention in the market by giving subsidy to Cornish tin mining on the ground of the principle of the way in using public money. In earlier years they put stress mainly on economic factors as reasons for depressed conditions and later on fragment production of Cornwall and little significance for the national security. And sometimes a lack of unity among Cornish mines was quoted to justify their attitude.

Thirdly, on the contrary of negative attitude to subsidy, the Government appeared to be interested in social problem caused by increasing unemployment. They sometimes tried to provide emigration assistance.¹⁴¹ In spite of an appeal from the Cornish mining interest,

¹³⁸ Department of Mines to Agnew, POWE 22/56.

 $^{^{139}\,}Minutes\,of\,the\,meeting\,30\,Jul.\,1938; Correspondence\,between\,Board\,of\,Trade\,and\,Colonial\,Office.\,CO\,852/140/4.$

¹⁴⁰ Corn., 1. Feb. 1934, p. 5.

¹⁴¹ 'State aided Scheme of Emigration', Corn., 28 Jun. 1922, p. 6; 'Should Cornish miners emigrate?', Corn., 2 Aug. 1922, p. 6 and so on.

'Subsidy instead of Dole' they never accepted this claim. They recognised well that the possibility of recovery of tin mining totally depended on the price of tin even though they did not yet regarded the industry as 'dead.' A letter from the Minister of Labour to the Department of Mines clearly indicated this. ¹⁴² If the price moved reversely, the subsidy given to the industry would be wasted. The dole would certainly help the unemployed and contribute to ease social tension. Moving mining population to other sectors while providing unemployment benefit seemed to be basic attitude of the Government, in other words the Government pursued the social policy while the Cornish mining interest sought the concrete policy for promoting the industry.

Fourthly, the Government were apparently interested in the British Empire more than in one county of England. As the largest producer of the world they concentrated on securing the material strategically from all over the world. Bridgeman's reply in earlier days and Campbell's remarks in later days were typically representing this position. Securing the route of supply of the mineral by the naval power and the international negotiation had the first priority. From this standpoint unilateral assistance to domestic industry would become obstacle to the negotiation. In addition, as mentioned before, a part of Cornish mining investors already put themselves in the international mining settings, by making investment of their capital in Malaya, Nigeria and so on.

As early as in 1920 after condemning the narrowness of argument of the deputation sent to the Board of Trade, J. Terrett, General Secretary for Metalliferous Miners' Union, made some interesting remarks in his correspondence to the local newspaper.¹⁴³

Without a great rise of tin the loan would, in fact, be a subsidy,..... Sir R. Horne was not to be deceived on so vital a point. The contention that depression has arisen from Government war restriction is radically weak and inconsistent.... Mr. Harris (a member of deputation) was condemning the profiteer right and left. Yet he utters a plaint that war time tin profiteering was not permitted.... Such argument is fundamentally trashy.... The remedy is, of course, as plain as pikestaff, but the owners with colonial investments do not want it, and one section of the Labour party are afraid to demand it. The scientific solution is to settle, first of all, whether a derelict industry is worth preserving. If not, then the £200,000 (the amount asked by the deputation) would be better spent in removing workers and training them for occupation of economic value. But if Cornish mining is regarded in its small way as a real asset, the loss of which would affect metalliferous mining right throughout the Empire, then its preservation should be on scientific principles, such as those now being very properly applied to arable cultivation. Up to an output of, say, 4,000tons (metal) the State should guarantee a price to sufficient to pay living wages and a return on capital. The excess of the guaranteed price over the market price should be entirely raised by a levy on foreign and colonial imported tin - mostly the product of cheap Chinese labour. This would, in effect, be an imposition on the users of tin, of fair wage conditions in their suppliers. Why, then, should a Welsh tin-plate works or other concerns using tin be permitted to acquire raw material by the permanent degradation of the St. Just or Camborne miner? If Labour statesmanship is too timid, hide these, then it is twaddle to talk about Labour being fit to govern.

¹⁴² Ministry of Labour to Department of Mines, 20 Jul. 1931, POWE 22/54.

¹⁴³ 'Correspondence' to WMN., 9 June 1920, reprinted in Corn., 16 June 1920, p. 3.

Attributing the depressed position to the competition with Malayan, Nigerian and other mining areas of the world working with cheap labour, he correctly said that if Cornish mining should be preserved on the ground of national security, the income transfer from other sectors of British industries to tin mining should be made. And if the policy for preservation of the industry should be abandoned, then the Government should work to move miners smoothly to other sectors of the economy using the public money. He hit on the very centre of the argument though it was refuted instantly by H. Thomas.

Cornish miners and their dependents who lived on the dole and sometime were forced to make decision whether emigrate or not were probably the most suffered people in the course of development during the inter-war period. They lived in the world of alternating between hope and despair.

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