THE SIAMESE ADMINISTRATIVE ÉLITE IN THE EARLY TWENTIETH CENTURY AND THE HISTORICAL ORIGINS OF UNDERDEVELOPMENT IN SIAM*

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Siamese economic policy and administration in the last three decades of the absolute monarchy has long been the focus of critical scholarly analysis. The most longstanding criticism has been that the Siamese authorities in this period were almost invariably conservative and unimaginative in the use of the resources which they had at their disposal, with the result, it is alleged, that they failed to exploit the full economic potential of the kingdom in the short term or to lay the foundations for more securely based economic growth in the future. years have seen the emergence of the more radical criticism that economic policy and administration in early twentieth century Siam was not simply short-sighted and unreasonably conservative, but more seriously that the very considerable economic interests and political influence of the Siamese administrative élite itself stood as a critical obstacle to the emergence of a more prosperous and economically stable Siam. The present paper has two principal objectives. First, to suggest that these criticisms are not fully sustained by a careful reading of the Siamese administrative records of the early twentieth century; second, to argue that by placing state economic policy and administration and, in some cases, the economic interests and political influence of the administrative élite at the centre of the analysis, these criticisms may even have hindered progress towards a fuller understanding of the historical origins of Siamese underdevelopment.

Ι

The first major scholarly analysis of Siamese economic policy under the late absolute monarchy is that contained in James C. Ingram's Economic change in Thailand since 1850 which was published in its first edition in 1955. A central argument in Ingram's analysis was that in the allocation of its financial resources, (both tax revenue receipts and the proceeds of foreign loans), the Siamese administration of the early twentieth century failed to provide sufficient funds to projects and programmes of a developmental character. Rather, he argued, the Siamese authorities consistently preferred to devote the resources at their disposal to programmes that would, in the immediate term, secure the internal administration and external security of the kingdom. Thus very considerable emphasis was placed on the construction of a railway network designed to improve commun-

ication between the capital and the outlying provinces of Siam. More seriously, in Ingram's view, a very substantial proportion of the kingdom's loan funds and tax revenues was devoted to the creation of reserves to support the government's paper currency issue, and to support the external value of the baht after the currency was placed on the gold-exchange standard in 1902. is held that these reserves far exceeded the normal requirements of the paper currency issue or the exchange. The major casualty of the administration's allocation of resources was, according to Ingram, the series of irrigation proposals which were placed before the government in the opening two decades of the twentieth century. Although the important economic advantages which would arise from a large-scale irrigation project in the central plain were clearly laid before the administration, (notably the assurance of an adequate supply of water for rice cultivation in all years, and the promotion of agricultural diversification by the provision of opportunities to cultivate dry season crops), all major irrigation proposals from the beginning of the twentieth century were rejected by the government, until in 1915 the implementation of one relatively modest scheme was sanctioned. The result, it is argued, was that an important opportunity to make a major investment in the future prosperity and stability of the kingdom's rice economy was lost. It should be added that in the Siamese administration's decision to commit funds to the construction of railways and the maintenance of high reserves rather than to irrigation works, Ingram sees the powerful influence of a series of British financial advisers who were appointed by the Siamese government from the last years of the nineteenth century.

Writing some twenty years after Ingram, David Feeny proposed a more radical explanation for the failure of the Siamese administration to implement a major irrigation programme in the early twentieth century. 2 Of considerable importance in his analysis was the fact that in the final years of the nineteenth century the Bangkok élite, including members of the royal family and of the major bureaucratic families, had acquired substantial holdings of agricultural land in the Rangsit area to the immediate north-east of the capital. This was an area which had been opened up and provided with relatively advanced water control facilities by the Siam Canals, Land and Irrigation Company, established in 1888. During the 1890s large numbers of agricultural families moved into Rangsit, sending up land prices and rents, and as a consequence the investments by the Bangkok élite in this area became an important source of private income for that class. It was Feeny's contention that that financial interest would have been seriously threatened by the construction of major irrigation works in other areas of the central plain. It was suggested that the construction of new irrigation facilities away from Rangsit would almost certainly have drawn many agricultural families out of that area, for by the early twentieth century the Rangsit canals and dykes were falling into

disrepair. The result would have been a fall in land prices and rents in the Rangsit area and hence a substantial loss of income on the part of the Bangkok landowning élite. There was thus, argued Feeny, a conflict between the Bangkok élite's private interest and the welfare of the kingdom taken as a whole which would clearly have benefited from the construction of major irrigation works in the central plain. In this conflict, it was implied, the Siamese administrative élite allowed its private interests to dominate, with the result that proposals for largescale irrigation works in the central plain were consistently rejected in the early twentieth century. To strengthen this argument Feeny noted that when, in 1915, the administration did finally sanction a limited irrigation scheme it was for an area which was adjacent to Rangsit and was designed essentially to improve the flow of irrigation water into the latter area. other words, the Bangkok élite was prepared to sanction an irrigation project which would secure an increase in land values in an area where they were major landowners. It should also be noted that Feeny employed the same basic argument to explain the tardiness of the Siamese administration in promoting more scientific agricultural practices in this period. Thus it was not until 1916-17 that the authorities proceeded with the establishment of an experimental farm for rice. It was located in Rangsit where, presumably, local cultivators and landowners were to be the principal beneficiaries of the farm's experiments and trials.

A further major focus of critical analysis has concerned the allegation that in the early twentieth century the Siamese administration made little serious attempt to refashion the basic structure of the kingdom's economy. To be specific, it is alleged that the authorities were not concerned to diversify the economy away from its dangerous dependence on the export of a limited number of primary commodities by encouraging the growth of non-agricultural production. A moderate form of this criticism can be found in Ingram, though the argument is only implicitly expressed. Reviewing the century of economic change in Siam from 1.850, he argued that:

most changes in the economy as a whole were in volume rather than in kind. New methods were not used, new products were not developed. No product of any importance (except rubber) was exported in 1950 which was not exported in 1850. (Ingram 1971:209).

Essentially the same argument was also presented, although far more vigorously, by Benedict R. O'G. Anderson in an article which appeared in 1978. In a passage critical of the widely held view that the later absolute kings were farsighted, dynamic, modernizing rulers, Anderson quoted Ingram's description of economic fossilization noted above, and then added:

One naturally asks where all that modernizing dynamism

went. Why was it that, after a century of modernizing rulers, a 'uniquely independent' Southeast Asian state remained so backward? Why did its export economy look like a retrogade version of the neighboring colonial economies...? (Anderson 1978:216)

The absence of major structural change in the Siamese economy over the period of the later nineteenth and twentieth centuries, and more specifically the observation that capitalism had failed to take root in the kingdom despite the penetration of the economy by capitalist influences from the 1850s, has in recent years also attracted the attention of a considerable number of Thai scholars of the younger generation, among whom the most prominent is Chatthip Nartsupha. 3 The principal feature of the work of Chatthip, and of the school of political economy which has emerged in Thailand largely as a result of his writings and scholarly encouragement, is that it seeks to interpret the historical development of Siam's economy and society from a Marxist perspective. The foundation of the Chatthip analysis is his characterization of the precapitalist (or saktina) economy of the kingdom. prominent features of that social formation have been identified. First, it was argued that the village in the precapitalist economy was an essentially self-sufficient community in which agriculture and handicraft production, (notably the weaving of cloth), were both pursued. As there was no pronounced division of labour between villages, internal trade was very limited and was usually conducted on a barter basis. Moreover, within each village there was no marked disparity in wealth among the inhabitants. brief, in this period 'the villages did not contain any dynamic potential, but persisted inexorably through time in their static form' (Hong 1984:144). Second, Chatthip argued that in the precapitalist social formation the king, and in practice the Bangkok élite as a whole, had control over the major part of the land, labour and capital resources of the kingdom. Consequently a disproportionately large share of the kingdom's surplus product was channelled towards this élite urban class, who in turn devoted a major portion of these resources to expenditure on Bangkok and the court, and on internal security and external defense. For their part, the cultivators, who were the essential source of this surplus product, were deprived of the resources through which they would be able to raise their productivity in agriculture or to transform their economic role. In short, according to Chatthip, the exploitation of the peasantry by the urban élite the constant and considerable flow of resources from the rural economy to the capital - stifled whatever economic initiative that the people might have had. Crucial to Chatthip's analysis was the further observation that the penetration of the Siamese economy by capitalism after the kingdom was opened to virtually unrestricted international trade from the middle of the nineteenth century, did not lead to the disintegration of these precapitalist structures. Rather the post-1855 economic system could be characterized as 'saktina combined with capitalism'. In practice

members of the *saktina* class, (the royal and noble administrative élite), were able to use their entrenched economic and political position to absorb the growing Chinese merchant community, and in this way the latter was prevented from developing into an independent and powerful bourgeoisie, capable of affecting fundamental change in the structure of the Siamese economy.

The foregoing remarks, being as brief as they are, cannot do justice to the complexity and sophistication of the analyses under review. However it is to be hoped that at least one essential point has been established: that is, that each of these writers, from Ingram to the Thai political economists such as Chatthip, has placed the Siamese administrative élite - whether as the formulators of government economic policy or as the controllers of the major portion of the kingdom's productive resources - at the centre of the analysis. It is the élite, whether through lack of foresight and imagination, or through their entrenched economic and political interests, who are held to have had a major responsibility for the alleged absence of substantial economic change in Siam in the period from the middle of the nineteenth century.

ΙΙ

In turning now to assess these analyses, it is proposed first to examine in detail Feeny's argument, and evidence, that a desire to protect the existing private interests of the Siamese élite was a critical obstacle to the adoption by the government of a major irrigation programme in the early twentieth century. 5 It would be naive to expect a bold statement of such élite selfinterest, secured at the expense of the welfare of the kingdom as a whole, to appear in the Siamese administrative records now held in the National Archives in Bangkok; and, indeed, Feeny does not appear to have located such a declaration. Rather, to support his argument he places considerable weight on a paragraph which appeared in a report published by the Royal Irrigation Department in 1927. It is a paragraph which purports to explain the administration's decision in 1915 to proceed with an irrigation project in the Pasak district, adjacent to Rangsit, rather than one on the west bank of the Chaophraya, some distance from Rangsit, in Suphanburī.

The Government took the above course probably because it was considered inadvisable to disturb existing arrangements of landlords and tenants in the Rangsit area and elsewhere, which the opening up of big areas of land in Subhan, free for all, must have done. (Quoted in Feeny 1982:83-4)

The critical phrase here concerns possible disturbance to the 'existing arrangements of landlords and tenants in the Rangsit

area and elsewhere . Feeny interprets this to mean the exodus of cultivators from Rangsit that would almost certainly have occurred if a major new area of land were to have been opened up for rice cultivation and provided with more advanced water control facil-This inference is probably a safe one. He proceeds to suggest that such an exodus of tenant-farmers would probably have led to financial losses on the part of the Rangsit landowners, (again probably a safe inference). But he then argues that it was this threat to the financial position of the Rangsit landowners, many of whom were powerful members of the Bangkok administration, which was the important consideration in the decision of the government to proceed with Pāsak rather than Suphanburī.6 However, it need only be noted that there are other possible reasons why the Siamese administration may have considered it inadvisable to permit or encourage an exodus from Rangsit. example, it may have wished to avoid the possibly severe strain on local administration and on rural social and economic stability which a large-scale migration of farming families from Rangsit, the premier rice-growing district in the kingdom, might have There may have been concern that a major migration occasioned. might, at least in the short-term, disrupt rice cultivation in the central plain on a sufficiently large scale to pose some threat to the government's land tax revenues. In this context it should be noted, as indeed Feeny himself noted, that in early 1916 the British financial adviser, W.J.F. Williamson, who it may be assumed had no private interest in Rangsit, also recommended that Pasak be preferred to Suphanburī since this decision "would benefit areas already under cultivation and would avoid the problem of migration out of the Rangsit area" (Feeny 1982:82). In brief, whilst the Royal Irrigation Department report of 1927 does indeed strongly suggest that the important consideration in 1915 was that the authorities wished to avoid a large-scale migration from Rangsit, it offers no clear guide as to the reason or reasons why such a movement of population would have been unwelcome to the administration. On this point there can be only conjecture.

Two further points may be made with respect to Feeny's First, given the fact that in the last years of the analysis. nineteenth century the Bangkok élite had been able to utilize its political and economic power to secure large holdings of land in Rangsit, it is difficult to see why they would not similarly have moved to become important landowners in any new area, such as Suphanburī, that was subsequently opened up by major irrigation In this way the losses suffered in Rangsit might well works. have been recovered in the new area of irrigation development. In this respect it should again be noted that by the early twentieth century the Rangsit canals and dykes were falling into serious disrepair. In particular many of the canals were suffering from a rapid accumulation of silt which in turn was leading to poor drainage from the area. The result was an accumulation of soluble salts in the soils and excessive acidity which would over time contribute to declining yields (Feeny 1982:51,62). In these circumstances, land prices and rents in Rangsit would almost inevitably have come under downward pressure: they would certainly have fallen below those which would obtain in any newly developed area of the central plain which was being provided with really effective irrigation and drainage facilities. Thus, were the Rangsit landowners to have acquired land on a substantial scale in a new area of irrigation development they could have found themselves securing tenants in districts where rents were relatively high, losing them in an area of relatively depressed rents. In brief, by the early twentieth century the Bangkok landowning élite might well have been in a position to benefit from the opening up of new irrigated areas away from Rangsit. with regard to a major state irrigation investment in this period it is possible that, rather than there being an inevitable conflict between the private interests of the Bangkok élite and the wider interests of the cultivating population, there may well have been a convergence of private and public interest. view it might be argued that the élite, having invested heavily in Rangsit, were simply unable to undertake a major investment in another area, even one which now promised substantially higher returns. Unfortunately there can be no evidence to deny (or sustain) that criticism, for the point could be settled satisfactorily only by detailed reference to the private financial resources of the élite in this period. However, it may be noted that a major part of the cost of opening up a new area such as Suphanburī would have fallen not on the landowners, as had been the case with Rangsit which was developed as a private concession, but on the public purse. The final point to be made with respect to Feeny's analysis is as follows: there are clearly dangers in using evidence which relates to the Siamese administration's decision in 1915 to proceed with one particular, relatively small irrigation project at the expense of another, to draw conclusions with regard to the government's irrigation policy as a whole over the period from the early 1900s. Thus, even if it is accepted that a desire to protect the private interests of the Bangkok élite in Rangsit was the principal reason for the rejection of the Suphanburī scheme in 1915, it does not necessarily follow that that same consideration was of any importance in the administration's rejection of van der Heide's major irrigation programmes in the previous decade.

A close reading of the Siamese administrative records concerned with irrigation in the opening two decades of the twentieth century reveals that there were a number of substantial considerations, many of them varying over time, which influenced the administration's policy in this period. There is space here to consider but three of them. First it may be noted that the attitudes and expectations of the Siamese authorities in commissioning the two major irrigation reports in this period, that from J. Homan van der Heide in 1902 and that from Sir Thomas Ward in 1913, differed substantially. The first report was born

essentially out of a dissatisfaction, initially on the part of the Minister of Agriculture, Chaophraya Thewet, with the deteriorating facilities in the private concession at Rangsit, and a belief, not formulated in detail, that henceforth the government itself must undertake the construction of irrigation works. 10 However, in engaging van der Heide there was little or no discussion within the administration as to the precise reasons why the kingdom should embark on such a major investment at that time, and there was certainly no decision as to the amount of capital which the state would be prepared to commit to it. 11 In contrast, in 1913 the then Minister of Agriculture, Prince Ratburi, was quite clear as to the need for a major irrigation investment: it would enable the Siamese rice cultivator to compete on equal terms with his counterparts in Burma and Indo-China, and was thus essential for the continued prosperity of the kingdom. 12 addition, in 1913 the administration decided firmly on the scale of the investment which it wished to make. In short, in the early 1900s the Siamese authorities, in effect, stumbled into consideration of an irrigation programme; a decade later the approach was considerably more sophisticated and calculating. The second point is that van der Heide himself must be allotted some of the responsibility for the eventual rejection of his irrigation report, published in 1903. The Dutch engineer appears to have been a man of grand, perhaps even grandiose, ideas, with the result that, left unfettered by the absence of precise instructions from the Siamese administration, he proceeded to produce proposals which far exceeded the financial resources and possibly also the contemporary agricultural requirements of the kingdom. 13 Moreover, in his relations with his Siamese subordinates in the Irrigation Department he appears to have been frequently insensitive and overbearing. Neither as administrator or engineer did he command loyalty or even respect within his department 14 and this undoubtedly came to influence the administration's attitude towards his proposals.

But undoubtedly the major reason why the Siamese administration of the early twentieth century failed to commit itself to a substantial investment in irrigation was that, given the other demands on the finances of the state, it simply did not have the resources to undertake either the van der Heide or the complete Ward programme. In practice, van der Heide's proposals were sabotaged by the Shan uprising in Phrae and Lampang in mid-1902 which forced the Bangkok administration to allocate immediately a sharp increase in resources for the more rapid construction of the railway to the north (Holm 1977:114-5). Full implementation of the more modest proposals of Ward presented in 1915 was foiled by the inability of the kingdom to raise a major foreign loan, as had originally been intended, following the outbreak of hostilities in Europe in August 1914.15 Although the presence of a financial constraint has been clearly noted by earlier writers (Ingram 1971:200; Feeny 1982:81), the rigid force with which it bore down on the Siamese administration has not

been sufficiently emphasized. It is commonly argued that given the political and occasionally even military threat faced by Siam from the imperial powers during this period, the administration understandably sought to invest in the construction of a railway network linking Bangkok with the extremities of the kingdom rather than commit resources to irrigation works which could do little, directly, to protect the sovereignty of Siam (Feeny 1982: In this context, for example, Feeny (op.cit., 77) noted 'the revealed preference of the government for investments in railroads' and, at another point, referred to 'the decisionmaking process by which the government decided not to invest in irrigation' (op.cit., 83). The financial adviser, the landlords at Rangsit, and the Bangkok élite are said to have 'favoured' railways over irrigation (op.cit., 81-2,84). But the use of the words 'preference' and 'favoured', and the reference to the 'decision-making process', implies some degree of choice, whereas in fact the Siamese administration, in the political and military circumstances it faced, simply did not possess the freedom to choose. If the political sovereignty of the kingdom was seriously threatened, as it was in the early twentieth century, then without question or calculation that threat had to be met; in part by the construction of railways, by the strengthening of the armed forces (to maintain domestic peace rather than repel external attack), and by the maintenance of foreign exchange reserves sufficient to secure the external stability of the currency in all normal trading circumstances. Moreover, investment in these areas had to reach a minimum level to be effective. In terms of the security of the kingdom, little would be achieved were construction of the northern railway to be halted at, say, Lopburī; unrest in the outlying provinces could be quelled only if the armed forces were maintained at a certain strength; exchange stability could be assured only if the reserves were held at an adequate level. 16 In summary, it is argued here that the broad pattern of government expenditure, the commitments to railways, the military and currency reserves, and even the general size of those commitments was determined primarily by Siam's weak international position in the early twentieth century, as the focus of imperial rivalry in mainland South East Asia.

Continuing this line of argument, the administration's failure to undertake major irrigation works can be said to reflect less the 'preference' of the authorities than the inescapable fact that once the commitments above had been satisfied the resources simply did not exist for a major irrigation investment. 17 Indeed, with respect to the 'preference' of the Siamese authorities, as noted above, there is evidence that in the early 1910s, although perhaps not before, members of the Siamese administration had acquired a clear appreciation of the importance of irrigation if Siam were to continue to compete effectively with her neighbours in the international rice trade, and that the government had a firm determination to proceed with such an investment. The fact that in 1913 the administration bore the expense of engaging a

second, and distinguished, irrigation engineer, Sir Thomas Ward, to draw up extensive irrigation proposals; the firm and precise manner in which it stipulated the size of the investment which it wished to make; its willingness to raise a loan in Europe to finance Ward's proposals; and perhaps most importantly of all. the clearly stated view of a major figure in the administration, the Minister of Finance, Prince Chanthaburī, that following the collapse of the attempt to raise a loan in Europe, irrigation should be given priority over the continued construction of the northern railway, 18 all bear witness to the government's new found perception and resolve. That this resolve was not translated into the full and prompt implementation of Ward's proposals was, again as noted above, primarily a consequence of the inability of Siam to raise a loan in Europe during the war years, whilst in the inter-war decades the increased costs of construction (Feeny 1982:63), the budgetary problems of the 1920s and the depression of the 1930s made a major investment in irrigation difficult and then simply undesirable.

In summary, it is argued here that the explanation for the failure of the Siamese administration to undertake a major irrigation programme in the early twentieth century lies primarily not in the attitudes, perceptions or self-interest of the Siamese élite, but in the severe constraints imposed on the formulation and execution of Siamese economic policy by the European imperial The argument that the Bangkok élite allowed consideration of self-interest to influence strongly the administration's irrigation policy can be substantiated neither by documentary evidence nor by a priori reasoning. The view that the Siamese administration was invariably short-sighted and unimaginative in its assessment of the potential benefits of a major irrigation investment is belied by the appointment of Sir Thomas Ward in That there was no major irrigation investment in this period was primarily because the European imperial presence in mainland South East Asia severely diminished the authority of the Siamese administration in the disposition of the scarce resources which it had at its command.

III

It is now possible to consider the observation that in the century from the opening of the kingdom to international trade in the 1850s the Siamese economy underwent no substantial structural change, and the related criticisms, either that the Siamese administration of the early twentieth century made little serious attempt to encourage the growth of indigenous non-agricultural production or, more radically, that the alleged exploitation of the rural districts by the urban élite stifled the economic initiative of the indigenous population. Discussion of this observation and these criticisms is made treacherous by the difficulties involved in characterizing precisely the nature

of the economic change experienced by the kingdom over the period from 1850. In the most general terms it is indeed clear that little fundamental distinction can be drawn between the broad structure of the Siamese economy in the later nineteenth century and its broad structure by the end of the absolute monarchy. need only be noted that according to a population census conducted in 1929, well over 80% of the working population of Siam were still engaged in agriculture, forestry, or animal husbandry (Central Service of Statistics:62). In the same year exports of rice and paddy still accounted for over 60% of total export earnings (op.cit., 76, 150-1). But although the absence of fundamental structural change is clear, this should not be interpreted as evidence of either economic stagnation or of the absence of substantial economic vitality and initiative in the kingdom over this period. Indeed, there is abundant evidence throughout these decades of the most substantial economic vigour and responsiveness.

Just two broad examples must suffice. The first concerns the dramatic expansion of rice cultivation and export which occurred over the decades from 1855 through to the 1930s, an expansion undertaken almost entirely on the initiative of indigenous labour and capital (Johnston 1981). It is possible that the increasing commitment of the rural population to the cultivation of rice for export during the second half of the nineteenth century arose in part through economic pressures applied by the Bangkok administration. More specifically, it can be argued that the gradual replacement of corvée obligations by cash tax payments, coupled with the substantially increased ability of the administration to assess and collect tax revenues following the bureaucratic and administrative reforms of the late nineteenth century, forced the peasantry to direct their labour and capital increasingly towards the cultivation of those crops, notably rice, which would provide a substantial cash income (Chatthip and Suthy 1981: 15-6). It might also be suggested that in abolishing slavery over the last three decades of the nineteenth century, the administration, in effect, pushed the rural population into the cultivation of rice for the world market, for the latter would now be required to take responsibility for their own livelihood. Although it would be extremely difficult to assess the strength of these two forms of pressure on the rural population, it is unlikely that they could have been of sufficient magnitude to account for more than a relatively minor part of the increasing involvement of the Siamese peasantry in the cultivation of rice for export in this period. It need only be noted that the average annual volume of rice exports rose from just under 113,000 metric tons in the first half of the 1870s to a little over 1,534,000 metric tons in the second half of the 1930s (Feeny 1982:127-9). This represented a 134-fold increase, achieved during a period when the population of the kingdom increased little more than 2½ times (op.cit., 21). In view of the magnitude of the increase in rice exports, it may be suggested that the more powerful influences on the

movement of indigenous labour and capital into rice cultivation were the rising price of rice in the second half of the nineteenth century 19 and the prospect, for the cultivator, of being able to purchase with his income from rice an ever increasing array of imported manufactured articles. 20 In other words it is argued that the rural population of the lower Chaophraya delta were attracted rather than forced into the cultivation of rice for the world market. If this analysis is accepted, then two important points may be made. First, the analysis implies that there was a substantial increase in the real income of the rice cultivator in the lower Chaophraya delta through the second half of the nineteenth century, even after the tax demands of the government and the commission of middlemen, millers and moneylenders had been met. 21 This in turn undermines the view of an exploitative saktina class draining off the rural surplus on a vast scale. Indeed, it suggests the retention of a substantial proportion of the newly-created wealth within the rice districts of central Siam, for without this incentive the movement of indigenous labour and capital into rice cultivation would almost certainly have occurred on a considerably smaller scale than in fact it did. Second, the analysis above indicates the most vigorous response to economic opportunities on the part of the rural population of the lower delta, which in turn again undermines the view of a stagnant indigenous economy, drained of its dynamic potential. 22

The second illustration of substantial economic initiative in Siam in this period concerns a number of commercial and industrial enterprises which were established in the kingdom in the final three decades of the absolute monarchy. The following may be briefly noted. The first, chronologically, was the Siam Commercial Bank which began operations, under the name of the 'Book Club' in October 1904 and which was incorporated by royal charter in January 1907.23 The founder of the bank was the then Minister of Finance, Prince Mahit, though his involvement in the enterprise was a private initiative. The capital of the Siam Commercial, at least in its early years, was provided mainly by Prince Mahit himself, a number of prominent Chinese tax farmers. the Privy Purse, the Deutsche Asiatische Bank, and Den Danske Landmandsbank of Copenhagen. 24 The principal concern of the bank in this early period was the conduct of exchange business, which it carried out in competition with the three established European banks in Bangkok, the Hongkong and Shanghai, the Chartered, and the Banque de L'Indochine. Despite being at the centre of a severe banking crisis in late 1913, after which it was reconstructed principally through a further major injection of capital by the Privy Purse, 25 the Siam Commercial grew into one of the foremost banks in the kingdom, and indeed it still occupies a prominent position in the Thai commercial banking system. The Privy Purse was also an important source of funds for the Siam Cement Company, providing one-third of its initial share capital when the company was established in 1913 (Siam Cement Company 1963:125). Indeed, the main initiative in the creation of the

enterprise came from King Vajiravudh himself. Machinery, technical expertise, and management were provided primarily by a Danish cement company, F.L. Smidth (Tandrup 1980:172). The Siam Cement Company began production in May 1915, thus fortuitously benefiting from the restriction of cement imports into the kingdom which arose from the war-time disruption of international trade (The Record July 1923:13-5; Siam Cement Company 1963:127). However, after the revival of foreign trade from 1918 the local company was able to retain a substantial share of the home market against foreign competition. The sales of the Siam Cement Company rose from approximately 25,000 tons in 1920 to 135,000 tons in 1940 (Siam Cement Company 1957:12). There even developed a modest export trade, principally to the Malay States. 26 At present Siam Cement not only retains a prominent position in the domestic cement market but has also diversified into such areas as the manufacture of asbestos-cement sheets and industrial fibres.27 Indeed it is perhaps the most prominent indigenous industrial concern in present-day Thailand.

Not all the commercial enterprises undertaken by the Siamese administrative élite in this period were as successful as the Siam Commercial Bank and the Siam Cement Company. Perhaps the most serious failure involved the Siamese Steamship Company which was inaugurated in January 1918 (Greene 1971:334-42; 1978:172). The company's fleet at that time consisted of three German merchant vessels which had been seized as enemy property by the Siamese authorities when Siam had declared war on the Central Powers in July 1917. The initial capital of one million baht was provided equally by the government on the one hand, and by a group of wealthy Siamese and Sino-Siamese entrepreneurs on the other. 28 Whilst trade was buoyant the new company enjoyed considerable success - indeed four new vessels were purchased in 1919 - but as the post-war trading boom broke it began to run into serious financial difficulties. Its problems were compounded by the loss of two vessels at sea, in February 1918 and in December 1920. In January 1922 management of the shipping line was transferred to the British-owned Borneo Company, but this reorganization could do little to solve the fundamental commercial weaknesses of the Siamese Steamship Company, and it was finally wound up in March 1926.

The final two examples of commercial and industrial enterprise in these decades depended upon neither the capital or the initiative of the Siamese administrative élite, at least in their early stages. Following the renegotiation of the kingdom's commercial treaties in the first half of the 1920s, the government was free in March 1927 to introduce a new tariff, a tariff which included a 25% duty on tobacco in all its forms. 29 In the years that immediately followed, there emerged in the kingdom a number of relatively small-scale cigarette manufacturers. They included the Eastern Tobacco Company (registered in 1927) and the Siamese Tobacco Company (registered in 1932), both of which were promoted

by Chinese or Sino-Siamese. 30 Unfortunately neither concern appears to have been able to produce cigarettes of an adequate and uniform quality, 31 with the result that they failed to compete effectively against either the standardized imported brands, despite a very considerable increase in the duty on imported cigarettes in the early 1930s, 32 or the output of the local factory of the British-American Tobacco Company which began operations in April 1933.³³ In 1939 the business and plant of the Eastern Tobacco Company were acquired by the Government.³⁴ At about the same time negotiations began between the Siamese authorities and the British-American Tobacco Company for the purchase of the latter's assets in Siam. 35 The transfer of ownership was completed in 1941, the British-American plant forming the basis for the government's Tobacco Monopoly (Ingram 1971:137,140) which continues to operate very profitably to the present. The second example of industrial enterprise in this period outside the initiative of the Siamese administrative élite concerns the Boon Rawd Brewery which was registered in August 1933.36 The brewery was founded by Phraya Phirom Phakdi, a businessman whose previous enterprises included, perhaps most notably, a passenger motorboat company (Phirom Phakdī 1975a:135-6). Unlike Malayan Breweries in Singapore (formed in 1931), which involved a partnership between the local firm of Fraser and Neave, and the Dutch brewers Heineken, the Bangkok company forged no formal alliance with a European brewery. 37 During its early years Boon Rawd enjoyed a considerable measure of tariff protection from imported beers. 38 though the success of the company in the 1930s was also derived in large measure from the high quality of the beer which it produced. 39 There is perhaps little need to add that Boon Rawd continues to hold an important position in the Thai beer market, despite the establishment of indigenous competitors, notably Amarit Beer, from the 1950s.

The emergence of these commercial and industrial enterprises in the early twentieth century provides a major problem of interpretation. The arguments put forward by Ingram (1971:209), endorsed and developed by Anderson (1978:215-6), that 'most changes in the economy....were in volume rather than in kind and, more importantly, that 'new products were not developed' in the century from 1850, appear to imply that this development in non-agricul-- tural production occurred on too small a scale to be analytically significant. 40 Then in Chatthip's analysis, the emergence of these commercial and industrial concerns is seen as simply one aspect of the absorption of the (predominantly Chinese) bourgeoisie into the *saktina* class in the early twentieth century, 41 a process which prevented the development of an independent capitalist class capable of promoting fundamental structural change in the Siamese economy. As a result of its almost unavoidable collusion with saktina political, administrative and economic power, Chinese 'merchant capital failed to change the mode of production of Siam' (Chatthip and Suthy 1981:31). The argument in this paper is that in seeking to understand the nature of the economic change

experienced by the kingdom in this period, it may be more valuable to concentrate on the examples, admittedly limited, of economic initiative and structural change which did occur, rather than on the general formulations of economic stagnation and fossilization proposed by Ingram and Chatthip, and to consider why those areas of undoubted economic vitality were not more extensive and influential than in fact they were.

Of the five commercial and industrial enterprises noted earlier, three were financially successful - the Siam Commercial Bank, the Siam Cement Company, and the Boon Rawd Brewery. case of the first, the Bank, a critical element in its success was the support which it received from the government. This was seen most dramatically during the bank crisis of December 1913 when the Siam Commercial was saved from collapse only through the prompt administrative and financial assistance of the authorities.42 However, government support in a less dramatic form was of considerable importance to the Bank right from its earliest days. Perhaps most notably, the government appears to have placed a substantial part of its business, in terms of the deposit of government funds and the conduct of exchange transactions, with the Siam Commercial rather than with the three European banks in Bangkok. 43 Not only did the government's custom provide the local bank with secure business but it would also have signalled official confidence in the concern to the wider public. commercial success of the remaining two enterprises, the Siam Cement Company and Boon Rawd Brewery, rested in part on the nature of the product they manufactured. As cement is a large bulk/low value commodity, the advantage in a particular market will always lie, all else being equal, with the domestic producer, who does not have to bear heavy transport costs, rather than with the foreign cement company. Similarly, with beer the advantage in a particular market should lie with the local brewery, for beer needs to be consumed within a few weeks of brewing if it is to be at its best. This is not to argue that efficiency and high product standards were not important for the commercial success of the bank, cement company, and brewery. Indeed, there are grounds for arguing that the two manufacturers, at the very least, approached international competitiveness in this period. was certainly the case with Siam Cement which, as noted earlier, was able to establish a position in the domestic market during the 1920s when there was virtually no tariff protection, and which was even able to develop a modest export trade during that decade. 44 For its part, Boon Rawd was apparently able to break the prejudice of the Siamese drinker for foreign beers within just one or two years of entering the market. 45 Given the very considerable expertise and experience required to establish a successful brewing plant - brewing in that period was as much an art as a science - this was a considerable achievement. Finally, the Siam Commercial Bank appears to have been able to provide services of a comparable quality to those of its European competitors in Bangkok in this period. 46 Nevertheless, it can be

argued that an important element in the commercial success of these three enterprises was the degree of assistance they received, from the government in the case of the Siam Commercial Bank, and from the nature of their product in the case of Siam Cement and Boon Rawd.

The same broad line of reasoning may be applied to the experience of the Siamese Steamship Company in this period. would appear that the operations of the company were severely hampered by the fact that its ships were aged and in bad physical condition, for they had been laid up in the port of Bangkok from August 1914 until they had been taken into service in early 1918.47 Moreover, according to the Financial Adviser W.J.F. Williamson, the company's steamers were not specifically suited for the trade in and out of Bangkok: for example, only two ships were equipped for the particularly lucrative coolie trade between Siam and the South China ports. 48 However, it can be argued that even with modern and appropriate ships the Siamese Steamship Company would still have experienced considerable difficulty in competing on the important runs from Bangkok to Singapore and Hong Kong. First, following the collapse of the post-war trading boom, shipping rates throughout the world were forced down to levels at which even major European shipping companies found it difficult to remain profitable (Sturmey 1962:56,64-5). and more important, the structure of shipping routes in the East appears to have been prejudicial to the profitable operation of small, indigenous lines such as the Siamese Steamship Company. The local concern could easily secure cargoes of rice in Bangkok for shipment to Singapore and Hong Kong, but, according to Williamson, it experienced considerable difficulty in obtaining inward cargoes for Siam. 49 The reason for this was almost certainly the fact that the major western shipping companies which brought cargoes of manufactured articles from Europe into, in particular, Singapore, would seek to employ their associate or subsidiary lines when those cargoes were trans-shipped for the smaller ports in the region such as Bangkok (Hyde 1973:92-3). Denied inward cargoes for Bangkok, the Siamese Steamship Company would have found it almost impossible to remain profitable on its operations overall.

The experience of the indigenous cigarette companies of the late 1920s and the early 1930s clearly stands in contrast to that of the cement and beer enterprises in that period. As suggested earlier, the failure of the Sino-Siamese tobacco companies to become established in the domestic market, despite the erection of a considerable tariff against imported cigarettes in the early 1930s, was due primarily to their inability to manufacture cigarettes of a sustained quality that would repel imports. In other words protection on the scale imposed was of little value to a technologically inferior indigenous industry. Nevertheless, it should also be noted that the increases in the import duty on tobacco in the early 1930s did have the effect of persuading the

British-American Tobacco Company to begin production within the kingdom, and although in the short term this contributed to the demise of the indigenous industry, it also introduced more advanced cigarette production techniques into Siam, provided a growing demand for local tobacco leaf, ⁵⁰ and, of course, provided the instrument for government ownership of the industry on the eve of the Japanese war.

The argument being developed here is that the pattern of economic change in early twentieth century Siam, and in particular the nature and extent of diversification away from agriculture in that period, was determined primarily by the powerful and diverse influences of the international economy. This was an inevitable consequence of the opening of the kingdom to virtually unrestricted foreign trade from the middle of the nineteenth century. The conditions, laid out in the Bowring Treaty of 1855, under which Siam's commercial intercourse with the outside world was transacted did permit some very limited economic diversification as, for example, into the manufacture of cement But if the Siamese administrative élite had from the 1910s. sought to promote major structural change in the economy in the early twentieth century then the conditions under which Siam was integrated into the world economy would have had to have been radically altered.

As the absolute minimum step this required the renegotiation of the kingdom's commercial treaties to restore Siam's fiscal autonomy which had been surrendered in the mid-nineteenth century. However, and this is the critical element in the argument, the restoration of fiscal autonomy, achieved in the 1920s, still left very severe limitations on the ability of the Siamese administrative élite to effect significant structural changes in the economy. One illustration of this point has already been given. The imposition of higher duties on imported beers in the early 1930s gave assistance to the newly-established local brewery, but this was an enterprise whose product in any event possessed 'natural' advantages against foreign competitors, whilst Phrayā Phirom Phakdī himself took care to secure the most modern production methods - by purchasing European plant and engaging European brewmasters. In contrast, high duties on imported tobacco could do little to assist a nascent Sino-Siamese cigarette industry which consisted of small-scale factories and which remained backward in its production methods. With an economy open to world trade, (and despite the tariff increases of the late 1920s and 1930s the Siamese economy clearly remained an open one in this period), such considerations as the difficulties in securing technological and industrial knowledge, shortages of trained and experienced personnel, as well as possible adverse factor endowments or the limited size of the domestic market, could each provide a formidable barrier to economic diversification within Siam. A high degree of import protection would be of relatively little assistance in overcoming those barriers.

Moreover, even in those cases where economic, commercial and technological circumstances did favour the establishment of a new industry within the kingdom, there remained serious limitations on the extent to which the administration could protect an enterprise in its infancy. First, one broadly undesirable result of imposing high import duties would be that almost inevitably the domestic price of the articles being protected would rise. Had the Siamese administration of the late 1920s or 1930s, seeking to promote a substantial measure of industrialization, imposed protective duties on a relatively wide range of manufactures, the almost certain consequence would have been a substantial rise in domestic prices for non-agricultural articles and thus a possibly sharp fall in real incomes, notably in the rural areas. At some point the imposition of protective duties across a wide range of manufactures would become socially disruptive, even if it succeeded in creating industrial employment. Second, as the prosperity of the kingdom in this period still rested primarily on the export of rice, the erection of protective tariffs, even on a modest scale, laid Siam open to commercial retaliation by its trading partners. Thus, if the Siamese administration, in an attempt to develop an important local textile industry, had imposed a heavily protective duty on finished cotton goods, 51 it is quite probable that the major exporters of piece goods, including Britain, would have been encouraged to take retaliatory action against the Siamese rice trade. would have had potentially disastrous consequences for the kingdom.

In addition to these external considerations it should be noted that Siamese economic policy and administration in this period was also forced to act under a number of serious internal constraints, although even here there were important external origins. Three brief examples may be given. The first involved an acute shortage of appropriately trained and experienced government officials. In part this was a reflection of the fact that a reformed national system of education was, in this period, still in its infancy, 52 and thus the supply of suitable locally-educated recruits for the higher levels of government service was limited. Moreover, it was almost invariably the case that the relatively small number of highly competent officials who did emerge were drafted into the major ministries, principally the Ministry of the Interior, 53 rather than into commercial or agricultural departments. Thus an attempt made by the administration in the early 1900s to develop government research into improved agricultural techniques with the aim of promoting more advanced cultivation practices in the kingdom broke down largely because the official selected to direct this work was found to be incompetent, inadequately trained, and lacking in commitment (Johnston 1975:340-2). In the early twentieth century there was certainly no prospect of the government securing a sufficient number of committed and adequately trained officials to ensure the implementation of a programme of scientific agriculture throughout the

rural districts of central Siam. The second constraint was that of capital. Under the terms of the Bowring and subsequent commercial treaties, the rates of taxation on land and on foreign trade, which were usually the two most important sources of government revenue in colonial-ruled primary producing territories of that period, were frozen at very low levels. Consequently, until Siam regained fiscal autonomy in the 1920s, the administration could secure major increases in tax revenue only by exploiting the existing tax structure more thoroughly - through substantial reform in the methods of tax assessment and collection. alternative it was of course possible for the government to raise capital on the European money markets to finance major projects, and in fact between 1905 and 1924 Siam borrowed overseas £13.63m., in large part to finance railway construction (Ingram 1971:181). But in practice the administration was severely constrained in this area by a strong fear of the political implications which could easily arise were Siam to have borrowed, on a substantial scale from the imperialist powers of Europe. 54 The Siamese élite were without doubt fully aware that in the last years of the nineteenth century, the granting of loans to the government of China by the western powers had been an important element in bringing the Middle Kingdom close to dismemberment. The final constraint to be noted was that imposed, indirectly, on the broad pattern of government expenditure by the presence of the imperial powers in mainland South East Asia. As was argued above during consideration of the government's irrigation policy, the Siamese administration was forced to respond to the European threat by investing heavily in a strengthening of the armed forces and, more importantly, in the construction of a railway network radiating from Bangkok and designed to ensure the effective administration of the whole kingdom from the capital. If the Siamese administrative élite sought to protect the political sovereignty of the kingdom then such investments simply had to be made, no matter how limited the resources at their command and no matter the strength of the competing demands upon those resources. a final point in this context, it need only be emphasized that the restrictions on the ability of the government to raise capital (both internally and externally) and the constraints on its freedom of deployment of the resources which it could command, both derived primarily either from the terms of Siam's nineteenth century commercial treaties with the major powers, or from the kingdom's delicate international political position in the late nineteenth and early twentieth century.

In summary: the essential argument of this section is a familiar one - that in the later nineteenth and early twentieth century, the increasing demands of the industrialized economies for the primary commodities of the non-European world, the technological advances being made in the industrial west, and the dominating influence of the industrial states over the structure of world trade and investment, condemned virtually all non-European states to an overbearing dependence on the production of

industrial raw materials and foodstuffs, and closed off any prospect of substantial economic diversification. 55 It is in view of considerations such as these that analyses which attempt to explain the failure of the Siamese economy to experience substantial structural change in the early twentieth century principally in terms of an alleged lack of economic foresight or imagination on the part of the Siamese administrative élite, or in terms of the élite's alleged suppression of the rural economy's dynamic potential, or their absorption of the Chinese merchant class, lose much of their persuasiveness. It must be emphasized that any administration in Bangkok in this period, whatever its persuasion, ideology, and economic foundation would have faced the same severe, externally imposed constraints on its ability to promote substantial economic diversification within the kingdom. 56 Seen in these terms, the economic power of the Siamese administrative élite in the early twentieth century was seriously circumscribed.

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There remains one important point to be considered. Although the Siamese administration of the early twentieth century was severely constrained in the promotion of substantial economic change, to what extent did the Siamese élite nevertheless appreciate the need for economic reform, for increased agricultural productivity and for diversification both within and away from agriculture? In fact, on a number of occasions in this period senior members of the administration offered cogent analyses of the emerging pattern of economic change in Siam, as well as farsighted proposals for reform. For example, as was noted earlier, in 1913 the Minister of Agriculture, Prince Ratburi, argued that the construction of large-scale irrigation facilities in the lower Chaophrayā plain was essential if the Siamese rice cultivator was to compete on equal terms with his counterparts in Burma and Indo-China. 57 In the absence of these facilities, he suggested, Siamese rice would rapidly find it difficult to compete in international markets, with the result that the kingdom would become increasingly impoverished. In the previous decade Prince Phenphatanaphong, the Assistant Minister of Agriculture, had argued strongly the importance of government investment in agricultural development, in part by the establishment of experimental farms, a station to breed work animals, and an agricultural college. Moreover, it is important to note that in this period a number of members of the Siamese élite undertook on their own initiative experiments in more advanced agricultural practices. Prominent in this respect were Sāi Sanitwongse, the son of an important half-brother of King Mongkut and the personal physician of King Chulalongkorn, who conducted trials with various forms of agricultural machinery on his Rangsit estate (Johnston 1975:54; Feeny 1982:52); Sāi's son, Suaphan Sanitwongse, whose agricultural activities included the organization of a rice-seed competition

in the Rangsit area in 1907;⁵⁹ and Mom chao Sithiporn Kridakara, a son of Prince Naret who was himself the eldest half-brother of King Chulalongkorn, who spent a major part of his life from 1920 on his farm at Bangbert, some 400 kilometers south of Bangkok, engaged in agricultural experimentation aimed at the development of a more diversified pattern of cultivation for Siam (Sithiporn 1970:1-3; Batson 1973:302-9; Feeny 1982:56). Reference should also be made to proposals presented in 1910 by the then Minister of Agriculture (Chaophrayā Wongsānupraphat), that the government should encourage the local production of a wide range of foodstuffs and household articles which, at that time, the kingdom was securing primarily through imports.

But without doubt the most critical analysis of the kingdom's economy in the final decades of the absolute monarchy was that put forward by Phrayā Suriyā who was the Siamese Minister in Paris in the early years of the century and then, on his return to Bangkok, Minister of Finance from 1906 to 1908 (Brown 1975: 164-92). In 1911 he wrote two economic textbooks under the title Sapsat (The science of property) in which he sought to explain in the broadest terms the relative economic poverty of Siam (Chatthip: 1978; Wedel 1982:50-8). In particular he drew attention to the contrast between an essentially indigent cultivating population, suffering from acute and persistent shortages of capital, and a wealthy élite who indulged in the conspicuous consumption of luxury articles and neglected the kingdom's needs for productive investment. The solution to Siam's economic problems would lie in the creation of mechanisms by which the economic surplus would be more equitably distributed between cultivator and capitalist, and to this end Phraya Suriya advocated that the kingdom's labouring classes be allowed to retain rights in the ownership, and to become involved in the management, of the factors of production. This would be achieved essentially through the creation of co-operative institutions and structures. Phraya Suriyā also advocated the establishment of a national bank to advance credit on advantageous terms to the cultivator.

Thus, a central theme in Phrayā Suriyā's analysis was that in early twentieth century Siam there existed a conflict between the economic behaviour of the élite and the interests of the cultivating population. It is, therefore, not surprising that his writings were strongly attacked by the authorities, including King Vajiravudh himself. And yet it is possible to see in the other analyses and proposals referred to above, those of Prince Ratbūrī, Prince Phenphatanaphong and Chaophrayā Wongsānupraphat, the prospect not of conflict but of a convergence of élite and non-élite interests. Thus, it was suggested earlier that a major state investment in irrigation would probably have been advantageous not only to the kingdom's cultivators, primarily through ensuring an adequate supply of water for rice cultivation in the central plain in all years, but also to the personal interests of the Bangkok administrative élite, through the

expansion of opportunities to acquire prime agricultural land which a large-scale irrigation programme would almost certainly Similarly both the cultivator and the landowner have provided. would presumably have welcomed any advance in agricultural technique that would have improved the productivity of the land. There is little reason to doubt that the keen interest taken by prominent Rangsit landowners, including most notably members of the Sanitwongse family, in agricultural experimentation in the opening decades of the twentieth century, was due at least in part to a desire to increase the value of their extensive land-The same general line of argument may be applied to holdings. the commercial and industrial initiatives of this period. Although a principal objective of the promoters of the Siam Commercial Bank was, of course, to increase their own wealth, the establishment of an indigenous exchange bank, breaking the European monopoly of exchange business in Bangkok, also brought substantial economic advantages to the cultivating population. Most importantly it ensured that the export of the rice crop would be financed in all seasons.⁶² Similarly, in establishing a local cement plant in the 1910s it is clear that not only did the promoters secure a substantial return on their capital, 63 but also that the Siamese population as a whole benefited from an increased availability of high quality cement, which was particularly important during the war-time disruption of trade, as well as increased employment opportunities. 64 Therefore if there was a conflict of economic interests involved in the foregoing initiatives, the conflict was less between groups within the kingdom than between the kingdom and foreign interests. the examples given above the disadvantage lay respectively with the Burmese and Indo-Chinese rice cultivator, the European exchange banks, and the foreign manufacturer of cement. is a further point to be made with respect to the commercial and industrial initiatives of the Siamese administrative élite in the early twentieth century, whether they involved collusion with Chinese businessmen as in the case of the Siam Commercial Bank or whether they involved some form of bureaucratic capitalism, as with the Siam Cement Company. 65 Where these initiatives were successful they clearly gave the Siamese administrative élite access to important new forms of wealth, and it must, therefore, be assumed that in these circumstances the élite would have strongly welcomed any further expansion of industrial or commercial enterprise in the kingdom. In summary, it is argued that the Siamese administrative élite, as landowners and as industrial and commercial partners, appear to have had every interest in seeing an increase in agricultural productivity and the emergence of a substantial industrial and commercial sector within Siam in the opening decades of the twentieth century.

But despite the critical analyses and the proposals for economic reform, despite even the prospect of increased economic power for the Siamese administrative élite itself if economic initiatives were pursued, there was clearly no firm commitment to

major economic change on the part of the Siamese administration in this period. In part this may have been a consequence of an awareness on the part of the élite that any initiative to promote major economic change in the kingdom would almost certainly be obstructed by the constraints outlined earlier. But there may have been two further important and related considerations. First, the generation of Siamese who had witnessed the opening of the kingdom to international trade in the middle of the nineteenth century could not at that time have foreseen in full the unprecedented economic changes, notably the dramatic expansion in foreign trade and the physical transformation of the central plain into one of the world's major rice producing regions, which were to occur in Siam over the following decades. It follows that the generation of the early twentieth century, when looking back, would naturally have been more inclined to marvel at the major economic changes which had been accomplished, or at least their more visible manifestations, rather than have directed a critical, doubting eye at the detailed pattern of economic change which was occurring in the kingdom. Second, it is important to note that from the middle of the nineteenth century right through to the 1930s Siam did not experience severe economic depression. true that there were a number of relatively serious contractions, for example towards the end of the 1900s and again at the end of the following decade, but there was nothing of sufficient magnitude to provoke or force the Siamese administrative élite as a whole into a searching examination of the structure of the kingdom's economy. In other words the problems of a long-term decline in agricultural productivity, the heavy dependence of exports on just one or two primary commodities, the limited extent of industrial development, each clearly existed or had its origins in the early twentieth century. But their critical importance in the determination of the living standard of the kingdom was not brought into sharp focus until the collapse of international trade in the 1930s and, more importantly, until the period of rising economic expectations which accompanied the European territorial retreat from Asia in the late 19^{4} Os and 195Os.

In addition it must be acknowledged that the pattern of economic change experienced by Siam in the later nineteenth and early twentieth century simply reflected the orthodoxy of the times. Thus, in essence, the character of economic change in the two rice-growing colonial neighbours of Siam was virtually identical to that of Siam herself in this period. Moreover, it should be noted that the colonial administrations in Burma and Indo-China were themselves not particularly concerned with the problems of agricultural productivity and agricultural diversification in these decades, of and they were certainly not concerned with the problem of excessive dependence on primary export earnings to the extent that they contemplated major structural change in the local economy. It was held simply that the non-European territories would achieve firmly-based prosperity through specialization in the production of those commodities in

which they had a comparative advantage. It was this orthodoxy that the Siamese élite, taken as a whole, accepted, not least because the kingdom had indeed experienced a quite unprecedented expansion in economic activity under that orthodoxy from the time Siam had been opened to international trade in the 1850s. It might well be argued that this economic orthodoxy represented yet a further external constraint, not in this case on the freedom of action of the administrative élite, but on its perceptions. If this was so, then the constraint was a powerful one, made powerful by the apparent advantage of the orthodoxy for the kingdom, at least until the economic turmoil of the 1930s.

NOTES

- * This paper, which was completed in early 1983, draws on material collected during research visits to Bangkok in 1978 and 1982. The first visit was made possible by the generous financial assistance of the Social Science Research Council, the second by that of the School of Oriental and African Studies. I would like to acknowledge also the assistance of Dr Chatthip Nartsupha (Chulalongkorn University), Ms Pornpen Hantrakool (Silapakorn University), Dr Hong Lysa (National University of Singapore), and Malcolm Falkus (London School of Economics) in giving their comments on an earlier draft of this paper. I remain responsible for all errors of fact and interpretation.
- 1. A second edition of this work appeared in 1971; in this paper the references are to this second edition. See, in particular, Ingram 1971: 79-87, 170-4, 194-202 for the analysis which is surveyed in this paragraph.
- 2. David Feeny, 'Technical and institutional change in Thai agriculture 1880-1940', Ph.D. Thesis, University of Wisconsin-Madison, 1976, which has been published in an extensively revised form. In this paper the references to Feeny's work are to this published version. See, in particular, Feeny 1982: 52-8, 60-2, 80-4, 103-5 for the analysis which is surveyed in this paragraph.
- 3. From an extensive literature see in particular: Chatthip and Suthy 1977; Chatthip and Suthy 1977a; Chatthip and Suthy 1981; Chatthip, Suthy and Montri 1981. In addition, recent years have seen the production of a large number of M.A. theses in this field from Thai universities, many being written under the supervision of Chatthip, as well as a vigorous discussion of these issues in Thai scholarly journals. There are admirable English language surveys of this literature in Hong 1984, and Reynolds and Hong 1983.

- 4. Neither has it been possible to consider all the relevant published work in this field. For example see: Bell 1970; Elliot 1978; Elliot 1978a; Feeny 1979; Hewison 1985.
- 5. It should be emphasised that although the landowning interests of the Bangkok élite in Rangsit occupy a central position in Feeny's analysis of the failure of the Siamese administration to undertake a major irrigation investment in this period, he does propose a number of other considerations which are said to have influenced the administration's policy in this area. For example, he observes that 'since Thailand did not have fiscal autonomy until 1926, the government was not in a position to capture some of the gains [from a major irrigation investment] by raising tax rates' (Feeny 1982:104). For his full analysis, see Feeny 1982:80-4, 103-5.
- 6. It might be added that this was also the view of Pelzer, who argued that the government's decision to ignore the advice of its irrigation expert, Sir Thomas Ward, that irrigation work should begin in Suphanburī, and to proceed instead with the Pāsak project 'was due to political pressure exerted by landlords who had interests in the Khlong Rangsit area' (Pelzer 1945:60. See also Credner 1935:220).
- 7. Although it may be noted that Feeny (1982:84) suggests that 'by 1903 elite who had speculated heavily in land at Rangsit were probably not in a financial position to attempt to extend their control over a much larger area.'
- 8. cf. Feeny 1983:703. 'If the van der Heide project had been undertaken and most of the Central Plain had been provided with irrigation, tenants would have left the Rangsit area, where many government officials and members of the royal family owned land, and would have migrated to newly irrigated lands. This contributed to the rejection of the van der Heide proposal...' See also Feeny 1982:104.
- 9. Many of the considerations to be noted below were also included in Feeny's discussion, (see,in particular, Feeny 1982:80-4). However the focus of his analysis clearly remained on the ways in which the interests of the Siamese élite would be affected by a major irrigation programme. Thus, for example, 'The van der Heide proposal and a number of other irrigation proposals were turned down because the élite were unable to capture the benefits'. (Feeny 1982:104)
- 10. Čhaophrayā Thēwēt to King, 23 November 1899, NA r5 KS 9.2/18. Čhaophrayā Thēwēt to King, 15 June 1900, 1 January 1901, NA r5 KS 9.2/28.
- 11. Documents in NA KS (Ag.) 11/1.

- 12. Prince Rātburī to King, 13 January 1913, NA r6 KS 4/2. Ward 1915: iii.
- 13. See, for example: Prince Devawongse to Chaophrayā Thēwēt, 10 May 1903, NA KS (Ag.) 11/71. Wongsānupraphat 1941:156; Ministry of Agriculture 1957:69-70; Ward 1915:3-5.
- 14. See, for example: Mom Anuruthathewa, 'Rai ngan kromkhlong klawthu'ng tangtae tangkromkhlong chonthu'ng tang Mom Anuruthathewa penchaokrom' (Report on the Canal Department from its establishment until the appointment of Mom Anuruthathewa as Director), NA KS (Ag.) 11/803.
- 15. Prince Chanthaburī to King, 20 February 1915, NA r6 Kh 1/29. Prince Chanthaburī to King, 16 September 1915, NA r6 KS 4/2.
- 16. In this context it may be noted that the statutory size of the exchange reserve fund, legally established in November 1908, was determined by the practical experience of supporting the exchange during a period of strong pressure against the baht from late 1906. Brown 1979:398-9.
- Chatthip would maintain that even though a major investment 17. in, for example, the construction of a railway network may have been politically crucial in this period, there were other areas of government expenditure - on defence, internal security, and the court - where very substantial reductions could quite easily have been made presumably without compromising the independence of the kingdom (Chatthip and Suthy 1981:30). In this way funds could have been released for a major irrigation programme. In making this argument Chatthip may have been influenced in part by the evidence of major expenditures on quasi-military forces and on the royal household during the reign of King Vajiravudh (Greene 1971: 102-16, 204-13, 288-306; Vella 1978:27-52, 267). observations may be made on this argument. First, it is important to note that the 'extravagances' of King Vajiravudh's reign led to severe budgetary crisis in the 1920s; in that sense the heavy military and court-related expenditures of the sixth reign were drawn in part from resources which, in the long term, did not exist. Second, the experience of the Ministry of Finance during the financially more circumspect fifth reign makes clear the very considerable pressures that the administration faced each year to keep government expenditures within its limited resources (Brown 1975: chaps.4-5). It might be added that substantial expenditures on defence, internal security, and the court (the administrative élite), may be said to be identifying features of state organisations as such, rather than of any particular political or social order. In summary, the capacity of the Siamese administration of the early twentieth century to reallocate its expenditure towards irrigation was almost

- certainly substantially less than is argued by Chatthip.
- 18. Prince Chanthaburt to King, 20 February 1915, NA r6 Kh 1/29.
- 19. Despite occasionally pronounced year-by-year fluctuations, the export price of rice for Siam may be said to have doubled over the last three decades of the nineteenth century (Feeny 1982:127-8).
- 20. This is the view of, for example, Ingram (1971:43).
- 21. Adas' study of the historical development of the rice economy in Burma argued that in the second half of the nineteenth century, those 'cultivator-owners who overcame the difficulties involved in clearing and cultivating new lands in the Delta were well rewarded for their years of assiduous toil...a large share of the profits of paddy production went to the cultivators themselves' (Adas 1974:74). Moreover 'in most areas of the Delta during the first phase of development [1852-1907] tenants enjoyed a standard of living which was roughly comparable to that of cultivator-owners' (op. cit.,:76). Adas also argued that 'the increased availability of [imported] consumer items had played an important role in stimulating surplus paddy production' (loc. cit.,).
- 22. This is an appropriate point to note an important conclusion by Hong from her work on the economy of the early Bangkok period. She argued that even in the decades prior to the opening of the kingdom to international trade in the 1850s, the economy 'did contain and encourage economic exchange, surplus production and internal trade' (Hong 1984:149). This point was also made by Reynolds and Hong: 'The pre-1855 economy was more dynamic, flexible, and responsive to the changes flowing from the provisions of the Bowring Treaty than the political economists are willing to recognize. The Thai economy in the early Bangkok period does not warrant the 'static' or 'stagnant' label that an Asiatic Mode of Production-like characterization would give it' (Reynolds and Hong 1983:91).
- 23. Siam Commercial Bank 1971:28.
 King to Čhaophrayā Thēwēt, 30 January 1907, NA r5 KS 12.2/12.
 Brown 1975:160-3.
- 24. Prince Mahit to King, 19 January 1906: King to Prince Sommot, 24 February 1906: NA r5 KS 12.2/12. Chatthip and Suthy 1981: 32, 397; Siam Commercial Bank 1971:29.
- 25. Privy Purse Department to King, 13 August 1914, NA r6 Kh 15/2. Immediately following reconstruction, the Privy Purse held approximately half of the stock in the Siam Commercial.

- 26. Annual Statement of the Foreign Trade and Navigation of the Kingdom of Siam, Department of H.M.'s Customs, Bangkok, annually 1927-28/1939-40. The export of cement from Siam appears to have reached a peak in the mid-1920s, when its annual value was just over 200,000 baht. The trade contracted sharply from the end of that decade, presumably in part because of depression in overseas markets.
- 27. In fact it was in 1938 that a subsidiary, the Siam Fibre-Cement Company, was established to manufacture asbestos cement sheets (Siam Cement Company 1963:129).
- 28. However, by November 1922 the principal shareholders were the Navy League, the Ministry of Finance, and the Privy Purse, who between them owned almost three-quarters of the capital in the company. qv. W.J.F. Williamson, 'Note by the Financial Adviser on the present position of the Siamese Shipping Company; and an opinion as to the policy to be adopted towards it by the Government', 3 November 1922, NA r6 RL 20/22.
- 29. Note: 'Rates of Customs Duty on Tobacco' [1934] NA K.Kh 0301. 1.37/91.
- 30. Ministry of Commerce (Bangkok), Department of Company Registration, Files 55, 219.
- 31. W.D. Reeve (Adviser to the Department of Customs) to the Director-General of Customs, 12 March 1934, NA K.Kh 0301.1. 37/91.
- 32. In January 1931 the import duty on tobacco in all its forms was raised from 25% to 50%: in February 1932 it was raised to 60%. Note: 'Rates of Customs Duty on Tobacco' [1934]NA K.Kh 0301.1.37/91.
- 33. F.A.P. Skivington (British-American Tobacco Company, Thailand) to Prince Viwatanajai Jaiyant (Ministry of Finance), 22 April 1941, NA K.Kh 0301.1.4/6. The British-American Tobacco Company, with its head office in London, had been importing cigarettes into Siam from at least the beginning of the century. Its decision to establish a factory in the kingdom, using a substantial quantity of locally-grown tobacco leaf, was almost certainly prompted by the heavy increases in the duty on imported cigarettes which had been introduced in the early 1930s.
 - 34. 'Aide-memoire', 14 May 1941, NA K.Kh 0301.1.4/6. Thompson 1941:399. There is no indication as to the fate of the Siamese Tobacco Company.

- 35. Documents in: NA K.Kh 0301.1.4/6. 'Re: Purchase by Government of British-American Tobacco Company (Thailand) Ltd.' (1939-1941).
- 36. Ministry of Commerce (Bangkok), Department of Company Registration, File 247. It should be added that although the administrative élite was not directly involved in the establishment of Boon Rawd, in 1933 the Privy Purse did lend the company 150,000 baht (Sangsit 1980:57; Phirom Phakdī 1975b:226-7).
- 37. Although it should be added that the Boon Rawd brewing plant was purchased from Germany and a German expert was engaged to erect it (Thompson 1941:448). Moreover, from the beginning of production, German brewmasters were employed in the plant (Personal interview with Khun Amon and Khun Sa-ngā, retired employées of the brewery, 13 July 1982, Bangkok).
- 38. In March 1934, W.D. Reeve, the Adviser to the Department of Customs, calculated that the excise duty on beer, after allowing for the customs duty on imported raw materials, gave locally-made beer a preference of approximately 20%. W.D. Reeve, 4 March 1934, NA K.Kh 0301.1.7/28.
- 39. Khun Amon and Khun Sa-ngā suggested that in its first years of operation Boon Rawd found it difficult to compete against imported beers. In part this was due to the almost inevitable problems which would arise in commencing brewing operations, in part to the prejudice of the Siamese consumer for imported beers, simply because of their foreign origin. But within a short period, they suggested, the high quality of Boon Rawd beers had broken that prejudice and had established the brewery firmly in the domestic market (Personal interview, 13 July 1982, Bangkok). Thompson (1941:448) suggested that Boon Rawd was an immediate success, paying substantial dividends after two years of operation.
- 40. Although it might be added that Ingram (1971:132-48) did provide a reasonably detailed account of domestic manufacturing industries in the period to 1950.
- 41. In making this point Chatthip and Suthy refer specifically to the 'collusion between Chinese businessmen and the royalty.' in the establishment of the Siam Commercial Bank (Chatthip and Suthy 1981:31-2).
- 42. Documents in: NA r6 Kh 15/2, 15/3.
- 43. It is interesting to note that in 1906 the British Minister in Bangkok alleged that Prince Mahit had used his position as Minister of Finance to transfer government funds hitherto held at the British banks to the Siam Commercial Bank. Paget

(British Minister) to Westengard (General Adviser to the Siamese Government), 15 May 1906, NA r5 KS 12.2/12.) Prince Mahit denied the allegation, arguing that the distribution of government funds between the various banks in Bangkok "depends upon the accident of which bank the money happens to be paid into by the persons who owe money to the Government"; and moreover that as the Hongkong and Shanghai "does not pay interest on deposits above a certain sum...the Government does not keep a large balance at that bank". (Westengard to Prince Devawongse, 22 May 1906, NA r5 KS 12.2/12.) But in fact it would be rather surprising if the government had not, in the interests of state, favoured the Siam Commercial over the British banks in the capital. There was certainly no legal, political, or financial reason why such favour should not have been exercised.

- 44. Even when the new tariff was introduced in March 1927, imported cement attracted a duty of only 5%, the general rate under the new schedule. This rate was increased through the tariff revisions of the early 1930s. In April 1932 a specific duty was imposed on imported cement, the duty being increased further in September 1933. These latter impositions were introduced in response to the continuous dumping of large stocks of Japanese cement onto the Siamese market from the beginning of the 1930s. (James Baxter (Financial Adviser), 'Siam Cement Company', 15 September 1933, NA K.Kh 0301.1.7/31.)
- 45. Personal interview with Khun Amon and Khun Sa-ngā, 13 July 1982, Bangkok. It might be added that in this period beer was a relatively expensive drink in Siam and was, therefore, consumed mainly by more wealthy Siamese. For this class, therefore, demand for a particular brand of beer would almost certainly be determined more by quality than by price. Consequently, the tariff protection granted to the local brewery in the early 1930s would have been of relatively limited value to Boon Rawd unless it had been producing beers of a quality comparable to those which could be imported into the kingdom. The discriminating Siamese drinker would always be prepared to pay more for a good beer. this general context a distinct contraction in the volume of beer imports into Siam in the later 1930s should be noted: from 1,691,853 litres in 1936-37 to 974,084 litres in 1939-40. Annual Statement of the Foreign Trade and Navigation of the Kingdom of Siam, Department of H.M.'s Customs, Bangkok, various years.
- 46. This is perhaps an appropriate point to note that until 1941 the Siam Commercial Bank employed European managers. (Sithi-Amnuai 1964:35.)

- 47. W.J.F. Williamson, 'Note by the Financial Adviser on the present position of the Siamese Shipping Company; and an opinion as to the policy to be adopted towards it by the Government', 3 November 1922, NA r6 RL 20/22.
- 48. ibid.
- 49. ibid.
- 50. The British-American Tobacco Company was strongly encouraged to use local leaf by the fact that it was left free of excise, whilst foreign leaf attracted a high import duty. For its part British-American committed considerable capital and expertise to improving the quality of Virginia tobacco produced in Chiangmai and Chiangrai. 'Aide-memoire', 14 May 1941. NA K Kh 0301.1.4/6.
- 51. It should be added that under the terms of the commercial treaty with Britain which came into effect in 1926, the duty on cotton goods, (as well as that on iron and steel manufactures, and on machinery), was limited to 5% for a period of ten years (Ingram 1971:180-1). As Siam's commercial treaties each contained a 'most-favoured-nation' clause, the effect of this stipulation in the British treaty was to prevent the Siamese administration from imposing protective tariffs against any foreign cotton manufactures, at least until 1936.
- 52. See Wyatt 1969.
- 53. It is interesting to note that until 1910 the Royal Pages School, founded in 1899, trained officials solely for the Ministry of the Interior. Even after it was renamed the Civil Service School in 1910 that Ministry probably claimed most of its best graduates (Tej 1977:231-5).
- 54. The first serious proposal that the kingdom should raise a loan in Europe was made by Prince Mahit, the Minister of Finance, in late 1902, following the government's decision to proceed rapidly with the construction of the northern railway. But fears over the possible political implications of such a loan, perhaps most firmly expressed by the Minister of Foreign Affairs, Prince Devawongse, prevented the administration from reaching a decision until, in late 1904, a budgetary crisis arising in part from the demands of the railway construction programme, forced the issue. It might be added that the first loan was for the relatively modest sum of flm. and, on the insistence of the Siamese government, was secured simply on the general credit of the kingdom (Brown 1975:119-49).

This rather bold proposition may well provoke the observation 55. that from the middle of the nineteenth century Japan too was exposed to the demands of the industrialized economies for primary commodities, the superiority of western technology, and the dominating influence of the industrial states over the structure of world trade and investment, and yet, in sharp contrast to Siam, was able to undertake the most fundamental restructuring of her domestic economy. In reply it may be argued that Japan's political and economic relationships with the western world in the later nineteenth century differed very markedly from those of Siam. Two points may be briefly made. It should first be emphasized that Siam remained vulnerable to European military intervention and annexation at least through into the first decade of the twentieth century. This military-political consideration clearly had a profound influence on the perceptions and objectives of the Siamese élite in this period. In general terms it required the kingdom to accept an essentially deferential, submissive, relationship with western power. In contrast, insular Japan did not face the serious prospect of European occupation, and this permitted, perhaps even encouraged her to contemplate political and economic equality with the western nations. This manifested itself not simply in the development of a military capability but also in the need to restructure the economy on the western pattern. second point is that there are grounds for arguing that western manufactured imports found it considerably more difficult to penetrate the Japanese than the Siamese market in the second half of the nineteenth century. Two particular considerations appear to have limited the entry of western imports into Japan. First, the treaty port system, which remained in force until 1899, confined the activities of western merchants to the designated ports. A notable consequence of this restriction was to prevent western traders from establishing direct contact with Japanese wholesale dealers in the larger cities and towns of the interior. Second, the Japanese merchant community exhibited a number of features which discouraged the marketing of imported goods. For example, import transactions were usually conducted in cash, partly because the export trade too was conducted on a cash basis, partly because Japanese merchants sought to avoid forward transactions. Consequently, the import trade was largely confined to Japanese merchants with substantial capital resources. It might also be noted that in the later period the internal distribution of imports was controlled by various associations of Japanese merchants. These forms of protection, and the consequently slow increase in cotton goods imports, were important for the early growth of the indigenous cotton industry in Japan. (I am indebted to Dr Shinya Sugiyama of the Department of Economics at Keio University for these latter observations). Attention might also be drawn to the analysis by Moulder (1977:128-45) which

suggests that in the second half of the nineteenth century Japan was not incorporated into the world economy to the same degree as was China. Analyses which alternatively seek to explain the radically different courses of economic change in Japan and Siam in this period primarily in terms of internal considerations, for example by contrasting Japanese and Thai social values, or by drawing distinctions between the political institutions and economic structures of the two countries immediately prior to and following the establishment of contact with the west in the 1850s, include: Ayal (1969); Likhit (1981); Surichai (1981). Reference should also be made to Anderson (1978:198-209).

- 56. It must be emphasized that the Thai political economists offer some recognition of the influence of external considerations on the pattern of economic change in Siam in this period. For example, Chatthip and Suthy note (1981:34) that because of the free inflow of foreign manufactured goods, Chinese factories like sugar refineries and Siamese local industries in the central region had to close down'. And again, 'the local industries of various countries throughout the world suffered a rapid decline when they were opened to international trade, or exposed to the force of imperialism, in the nineteenth century. Of course, Siam was no exception' (1977:146). In fact, at one point Chatthip and Suthy (1981:34) propose that 'the sakdina system and imperialism... prevented the emergence of an independent bourgeois class in Siam'. However, it remains that the main focus of the political economy analysis has concerned Siam's internal social, economic and political structures. The primary purpose of this paper has been to suggest that the crucial considerations for explaining the historical origins of Siamese underdevelopment were the external constraints ('imperialism') outlined at length above. These influences were considerably more varied and powerful than the political economy analysis appears to allow.
- 57. Prince Rātburī to King, 13 January 1913, NA r6 KS 4/2.
- 58. Prince Phenphatanaphong to Chaophrayā Thewet, 26 October 1904, NA r5 KS 10/1.
- 59. Johnston 1975:363. See also Suvabhan (1927) which includes a brief biography of Suaphan Sanitwongse by Prince Damrong.
- 60. Čhaophrayā Wongsānupraphat, 'Memorandum on our domestic economy', 7 December 1910: in Chatthip, Suthy, and Montri 1981:219-22.
- 61. Following the King's published criticism, Sapsat was banned. In the seventh reign the teaching of economics was made a criminal offence (Chatthip 1978:402, 408).

- 62. This was an important consideration. In late 1902, prior to the establishment of the Siam Commercial, the European banks in Bangkok had become involved in a serious dispute with the government over the determination of the exchange value of the baht following Siam's abandonment of the silver standard and the realignment of the currency with gold. During the course of this dispute the two British banks threatened not to purchase baht at the new rate fixed by the government, an action which might well have brought the rice trade to a halt. In the circumstances the Siamese government had little choice but to follow the demands of the foreign banks and fix the external value of its currency at a lower level (Brown 1979:384-5).
- 63. Between 1921 and 1937 the dividend paid by the Siam Cement Company was never less than 7% (in the years 1933-1936) whilst throughout the 1920s the company paid either 10% or 11%. (The Siam Cement Company: balance sheet presented to the annual ordinary general meeting of shareholders.) These records are held at the head office of the Siam Cement Company, Bangsue, Bangkok.
- 64. In 1923, just eight years after production had begun, the Siam Cement Company had a labour force of 230 Siamese and about 70 Chinese (*The Record* July 1923:13-5).
- 65. Chatthip, Suthy, and Montri 1981:22. Reference should also be made to Sangsit 1980:chap.2.
- 66. Government investment in the development of improved rice seed selection appears to have been even more tardy in Indo-China than it was in Siam. In the French colony a central rice station was created in 1927, and the Office du riz was opened in 1930 (Wickizer and Bennett 1941:238).

SOURCES

All the primary sources which have been used for this paper are held in the National Archives (NA) in Bangkok. The sources consulted and quoted in the notes above are drawn from three of the Archives' collections.

- (1) The administrative records and official correspondence of the Royal Secretariat, which cover the period from the mid-1880s (from the reform of government administration) until the end of the absolute monarchy in 1932. These records are divided first by reign, r5 (mid-1880s to 1910), r6 (1910-1925); and then by Ministry or Department, KS [] (kasētrāthikān/Ministry of Agriculture), Kh [] (khlang/Ministry of Finance), and RL [] (rātchalēkhānukān/Royal Secretariat). Thus, for example, the reference NA r6 KS 4/2 identifies a file from the records of the Royal Secretariat concerned with the Ministry of Agriculture in the reign of King Vajiravudh; the final number specifies the file in which the document referred to is held.
- (2) The internal records of the Ministry of Agriculture. In Thai these records are identified by [], followed by the file number. In this paper this reference has been transcribed as KS (Ag.)
- (3) The records from the Office of the Financial Adviser (sammakngān sētthakitkānkhlang). The financial advisers were British officials, appointed by the Siamese government from the late 1890s. These records are identified by the reference K.Kh [] 0301, followed by the file number.

REFERENCES

Adas, M.

1974. The Burma Delta. Economic development and social change on an Asian rice frontier, 1852-1941. Madison: Univ. Wisconsin Press.

Anderson, B.O'G.

1978. Studies of the Thai state: the state of Thai studies. In *The study of Thailand* (ed.) Eliezer B. Ayal. (Ohio Univ. Papers in Internat. Stud., Southeast Asia Series **54**). Athens, Ohio: Ohio Univ. Press, 193-247.

Ayal, E.B.

1969. Value systems and economic development in Japan and Thailand. In Man, state, and society in contemporary Southeast Asia (ed.) R.O. Tilman. London: Pall Mall Press, 535-49.

Batson, B.A.

1973. Review article: M.C. Sithiporn
Kridakara Memorial Volume. J. Siam Soc.
61 (1), 302-9.

Bell, P.F. 1970. The historical determinants of underdevelopment in Thailand. (Economic Growth Center Discussion Paper 84). New Haven: Yale Univ.

Brown, I. 1975. The Ministry of Finance and the early development of modern financial administration in Siam, 1885-1910. Ph.D. Thesis, Univ. London.

Central Service of n.d. Statistical Yearbook of the Kingdom Statistics of Siam, 1935-1936 to 1936-1937. Bangkok.

Chatthip Nartsupha 1978. The economic thought of Phraya Suriyanuwat. In Readings in Thailand's political economy (ed.) Vichitvong Na Pombhejara. Bangkok: Bangkok Printing Enterprise.

Chatthip Nartsupha & 1977. The rise of dependent commodity suthy Prasartset production in Siam, 1855-1910. Rev. Thai Soc. Sci., 144-68.

...... 1977a. (eds.) Socio-economic institutions and cultural change in Siam, 1851-1910.

A documentary survey. (Inst. Southeast Asian Stud., Perspectives Ser. 4).

Singapore.

...... [1978] 1981. (eds.) The political economy of Siam, 1851-1910. Bangkok: Soc. Sci.
Assoc. Thailand.

Chatthip Nartsupha, [1978] 1981. (eds.) The political economy Suthy Prasartset & of Siam, 1910-1932. Bangkok: Soc. Sci. Montri Chenvidyakarn Assoc. Thailand.

Credner, Wilhelm 1935. Siam. Das Land der Tai. Stuttgart: Deutsche Verlagsanstalt.

Elliot, D. 1978. Thailand: Origins of military rule.
London: Zed Press.

Elliot, D.	1978a. The socio-economic formation of modern Thailand. In <i>Thailand: Roots of Conflict</i> (eds.) A. Turton, J. Fast & M. Caldwell. Nottingham: Spokesman, 21-50.
Feeny, D.	1979. Competing hypotheses of underdevelopment: A Thai case study. <i>J. Ec. Hist.</i> , 39 (1), 113-27.
	1982. The political economy of productivity. Thai agricultural development, 1880-1975. Vancouver, London: Univ. Brit. Columbia Press.
	1983. Extensive versus intensive agricultural development: Induced public investment in Southeast Asia, 1900-1940. <i>J. Ec. Hist.</i> , 43 (3), 687-704.
Greene, S.L.W.	1971. Thai government and administration in the reign of Rama VI (1910-1925). Ph.D. Thesis Univ. London.
Hewison, K.J.	1985. The state and capitalist development in Thailand. In Southeast Asia: Essays in the political economy of structural change (eds.) R. Higgott & R. Robison. London: Routledge & Kegan Paul, 266-94.
Holm, D.	1977. The role of the state railways in Thai history, 1892-1932. Ph.D. Thesis, Yale Univ.
Hong Lysa	1984. Thailand in the nineteenth century. Evolution of the economy and society. Singapore: Inst. Southeast Asian Stud.
Hyde, F.E.	1973. Far Eastern Trade 1860-1914. London: Adam & Charles Black.
Ingram, J.C.	1971. Economic change in Thailand 1850- 1970. Stanford: Stanford Univ. Press.
Johnston, D.	1975. Rural society and the rice economy in Thailand, 1880-1930. Ph.D. Thesis, Yale Univ.
	1981. Rice cultivation in Thailand: the development of an export economy by indigenous capital and labor. <i>Mod. Asian Stud.</i> 15 (1), 107-26.

Likhit Dhiravegin

1981. The Meiji Restoration (1868-1912) and the Chakkri Reformation (1868-1910): a case for comparative study. In Comparative Development: Japan and Thailand (eds.) Chira Hongladarom & Medhi Krongkaew. Bangkok: Thammasat Univ. Press, 71-100.

Ministry of Agriculture

1957. Prawat krasuangkasēt (History of the Ministry of Agriculture). Bangkok.

Moulder, F.V.

1977. Japan, China and the modern world economy. Toward a reinterpretation of East Asian development ca. 1600 to ca. 1918. Cambridge: Cambridge Univ. Press.

Pelzer, Karl J.

1945. Pioneer settlement in the Asiatic tropics. Studies in land utilization and agricultural colonization in Southeastern Asia. New York: Amer. Geog. Soc.

Phirom Phakdī, Phrayā 1975a. Yorāingān prachamwan khong Phrayā Phirom Phakdī (Bunrōt Sēthabut) tangtāe p.s. 2415 thu'ng 2474 (An abbreviated account of the life of Phraya Phirom Phakdī, 1872-1931); 1975b. Prawat kamnoet utsāhakambia nai prathītthai (The origins of the beer industry in Thailand). Bangkok: Khurusaphā 1208, (a) pp.111-80 (b) pp.181-242.

The Record

1923 [July]. Industrial Siam: the Siam Cement Company. Bangkok: Ministry of Commerce, 9, 13-5.

Reynolds, C.J. & Hong Lysa

1983. Marxism in Thai historical studies. J. Asian Stud. 43 (1), 77-104.

Sangsit Piriyarangsan 1980. Thai bureaucratic capitalism, 1932-1960. M.Econ. Thesis (Eng. Lang. Program), Thammasat Univ.

The Siam Cement Company

1957. The Siam Cement Company (published in connection with the celebration of the year B.E. 2500). Bangkok.

.

1963. The Siam Cement Company: in commemoration of the 50th Anniversary (compiled and written by Kukrit Pramoj). Bangkok.

The Siam Commercial Bank

1971. Thīralu'k wanpoet samnakngānyai thanākhān thaiphānit čhamkat (In commemoration of the opening of a new head office for the Siam Commercial Bank). Bangkok.

Sithi-Amnuai, P.

1964. Finance and banking in Thailand. A study of the commercial system, 1888-1963. Bangkok: Thai Watana Panich.

Sithiporn Kridakara

1970. Some aspects of rice farming in Siam. Bangkok: Suksit Siam.

Sturmey, S.G.

1962. British shipping and world competition. London: Athlone Press.

Surichai Wun' Gaeo

1981. The significance of socio-political factors in Meiji economic development with comparative reference to the Thai case. In *Comparative Development: Japan and Thailand* (eds.) Chira Hongladarom & Medhi Krongkaew. Bangkok: Thammasat Univ. Press, 101-29.

Suvabhan Sanitwongse

1927. The rice of Siam. Bangkok [Published as part of the cremation volume for the author].

Tandrup, A.

1980. Some Danish contributions to the administrative and socio-economic development of Thailand since 1875. In *Thai-Danish Relations*. 30 Cycles of Friendship. Copenhagen: Royal Danish Min. of Educ. 115-75.

Tej Bunnag

1977. The provincial administration of Siam 1892-1915. The Ministry of the Interior under Prince Damrong Rajanubhab. Kuala Lumpur: Oxford Univ. Press.

Thompson, V.

1941. Thailand: the new Siam. New York: Macmillan Co.

Vella, W.F.

1978. Chaiyo! King Vajiravudh and the development of Thai nationalism. Honolulu: Univ. Press Hawaii.

Ward, T.R.J.

1915. Report on a scheme for the irrigation of so much of the valley of the Menam Chao Bhraya as may be possible for a capital outlay of one and three quarter millions sterling. Bangkok: Royal Irrigation Dept.

Wedel, Yuangrat (Pattanapongse)

1982. Modern Thai radical thought: the Siamization of Marxism and its theoretical problems. (Res. Ser. 4). Bangkok: Thai Khadi Res. Inst., Thammasat Univ.

Wickizer, V.D. & Bennett, M.K.

1941. The rice economy of monsoon Asia. Stanford: Stanford Univ. Press.

Wongsanupraphat, Chaophraya 1941. *Prawat krasuangkasētrāthikān* (History of the Ministry of Agriculture). Bangkok: Min. Agric.

Wyatt, D.K.

1969. The politics of reform in Thailand: education in the reign of King Chulalong-korn. New Haven & London: Yale Univ. Press.

