

Social and Economic Patterns of Landlord–Tenant Relationships in the Chao Phraya Delta, Thailand: An Historical Perspective

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For a long time, the Central Plain of Thailand has been integrated within the market economy; the resulting tenancy has often been attributed to growing social differentiation. Landowner–tenant relations constitute a focal point that mirrors economic, social and political issues. This paper focuses on these relationships and their evolution during the twentieth century. The overall picture is more balanced than commonly assumed, especially for the last thirty years, during which time real rents are shown to have declined.

With the dramatic development of peasant agriculture in Southeast Asia during the middle and late nineteenth century and the beginning of the twentieth century, land resources – once abundant and freely available – came under increasing pressure. Parallel with growing commercialisation, agricultural development was shaped by far-reaching redefinitions of power relationships between landowners and peasants, in regions under colonial and local rule alike. As capitalism spread to peasant economies, it is said, the increased dependency on international markets for export and on cash inputs for modern agricultural production drove the peasantry from relative self-sufficiency and non-monetary relationships into a precarious environment of competition and social disintegration. This triggered the eviction of weaker farmers, and resulted in the concentration of land in the hands of fewer and richer farmers. The inevitable downfall of small peasants is described as a process of indebtedness, loss of land and tenancy and finally eviction as wage labourers or an urban proletariat. Consequently, landlord–tenant relationships are assumed to reflect lopsided arrangements in which land- and capital-rich farmers extract surplus by imposing rents that keep tenants at or below subsistence levels.

Such processes have been observed at given points in time in some parts of Southeast Asia, notably Lower Burma around 1930 (with 50 per cent of villagers landless), in Java around 1960 or in central Luzon in the early 1970s.¹ The Central Plain

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¹ Robert E. Elson, *The End of the Peasantry in Southeast Asia: A Social and Economic History of Peasant Livelihood, 1800–1990s* (Canberra: Australian National University, 1997).

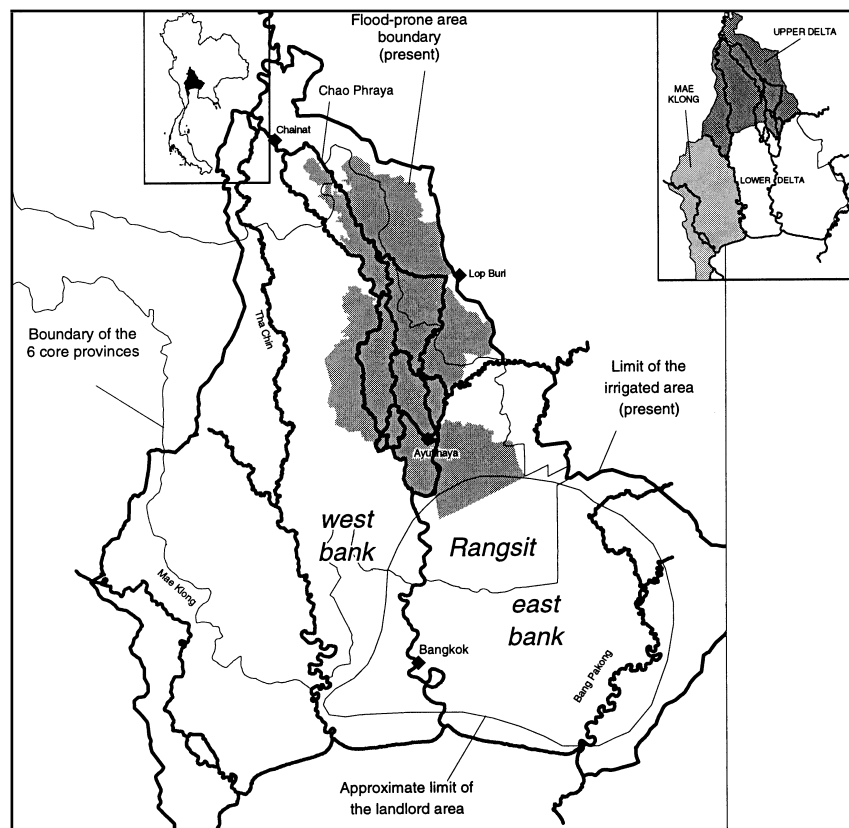
of Thailand represents a meaningful example of a market-oriented rice bowl and appears to be an exceptional case. Unlike other regions in Thailand, most human settlements there are recent and the reclamation of the Chao Phraya Delta has been associated with the export-oriented rice economy. This region underwent several crises during the twentieth century, prompting gloomy predictions. However, a recent study has shown that – contrary to common wisdom – the evolution of the land system over the last century is best characterised by its remarkable resilience rather than either a Marxist scenario of land concentration or a Malthusian process of farm fragmentation.²

The surge of the rice economy in Thailand is thought to have begun with the signing of the Bowring Treaty in 1855, which inaugurated new commercial relationships between Siam and England. The ensuing dramatic expansion of the rice frontier was fuelled by market demand and by the emancipation of the peasantry from *corvée* (unpaid labour) and bondage as a result of the reforms of King Chulalongkorn (1868–1910). These historical circumstances have been described in numerous works whose salient points are recalled here.³ The Siamese nobility, with the loss of its control over labour and the increased commoditisation of land, acquired most of the land being reclaimed around Bangkok by the state or by designated private companies. While rice had been cultivated in the flood-prone regions of the delta for a long time, what will be referred to here as the ‘landlord area’ spread over most of the lower Chao Phraya East Bank, including the Rangsit Scheme (see Figure 1). In this area, urban-based landlords initially attempted to cultivate their land through bonded or wage labour but eventually left it to tenants, while retaining ownership up to the present time. In the rest of the ‘rice frontier’, however, land was reclaimed by individual independent peasants. Three areas – the flood-prone area and other older settlements in the upper delta, the landlord area, and the ‘silent frontier’⁴ – can be contrasted in terms of ecology and history.

2 François Molle and Thippawal Srijantr, ‘Between Concentration and Fragmentation: The Resilience of the Land System in the Chao Phraya Delta’, in *Thailand’s Rice Bowl: Perspectives on Social and Agricultural Change in the Chao Phraya Delta*, ed. François Molle and Thippawal Srijantr (Bangkok: White Lotus, forthcoming).

3 General studies of the topic include James C. Ingram, *Economic Change in Thailand 1850-1970*, 2nd edn (Kuala Lumpur: Oxford University Press, 1971); Somphop Manarangsan, *Economic Development of Thailand, 1850-1950: Response to the Challenge of the World Economy* (Bangkok: Chulalongkorn University Institute of Asian Studies, 1989); David Feeny, *The Political Economy of Productivity, Thai Agricultural Development, 1880-1975* (Madison: University of Wisconsin Asian Studies Monographs, 1982); David B. Johnston, ‘Rural Society and the Rice Economy in Thailand: 1880-1930’ (Ph.D. diss., Yale University, 1975); and *Thailand: A Rice-Growing Society*, ed. Yoneo Ishii (Honolulu: University of Hawaii, 1978).

4 The rest of the rice frontier can be termed a ‘silent frontier’, as little information is available on the process of its expansion. Historical data focus on the East Bank, where extensive disputes challenged the interests of the nobility. This ‘Rangsit bias’ is probably responsible for a distorted vision of agricultural development in the delta.

Figure 1. GEOGRAPHICAL DIVISIONS AND LAYOUT OF THE CHAO PHRAYA DELTA

Concern about tenancy emerged fully after World War Two. From the 1960s to the early 1980s, more critical problems of agricultural stagnation and population growth developed into an agrarian crisis, and the land issue became the subject of heated academic and political debate. Several observers warned that 'population pressure and inheritance practices [were] constituting the primary pressures upon farmers to engage in tenancy', with 'nearly 50 per cent of paddy fields [being] tenant cultivated'.⁵ Others eventually saw this period as the outcome of a deleterious process of capitalist penetration in the Central Plain.⁶ The 1970s, with a succession of farmers' protests,

5 Takashi Tomosugi, 'The Land System in Central Thailand', *Developing Economies*, 7, 3 (1969): 303. See also the discussion in P.C. Wagstaff, *Problems Associated with Rural Land Tenure in Thailand* (Bangkok, United States Operation Mission, 1970); Robert E. Ramsson, 'Closing Frontiers, Farmland Tenancy, and their Relation: A Case Study of Thailand 1937-1973' (Ph.D. diss., University of Illinois, 1977); Steven Piker, *Sources of Stability and Instability in Rural Thai Society* (Swarthmore, PA: Swarthmore College, 1967).

6 Andrew Turton, 'The Situation in the Thai Countryside', in *Thailand, Roots of Conflict*, ed. Andrew Turton *et al.* (Nottingham: Spokesman Books, 1978), pp. 104-42; Witayakorn Chiengkul, *The Effects of Capitalist Penetration on the Transformation of the Agrarian Structure in the Central Region of Thailand, 1960-1980* (Bangkok: Chulalongkorn University, 1983); Mike Douglass, *Regional Integration on the Capitalist Periphery: The Central Plains of Thailand* (The Hague: Institute of Social Studies Research Report Series, 1984).

political turmoil and reforms, put landowner–tenant relationships into the spotlight.

This article focuses on the evolution of these relationships over the course of time. The first section discusses the diversity of rental contracts and identifies the main parameters that account for such a diversity, as well as variations over time and location. It is followed by a quantitative longitudinal analysis of real rents (using both historical secondary data and village studies) to highlight a historical declining trend. Finally, the article attempts to periodise the changing balance of power between landowners and tenants and to show that the overall picture is more balanced than commonly assumed.

Types and characteristics of land rental contracts

Modes of payment

As in many countries of Southeast Asia, four main types of rental contracts could be found in different proportions and different locations of the Chao Phraya Delta during the twentieth century. (a) The first mode – previously widespread – is expressed in terms of sharecropping, typically from one-third to one-half of the harvest. Common systems are *baeng khreung*, which indicates a division of the crop into two equal parts; *baeng neung nai sam* and *baeng ha*, with one-third and two-fifths respectively of the harvest handed over to the landowner. Several local variations of these arrangements can be found. (b) The second mode is also payment in-kind, but based on a fixed amount of rice per *rai*, most commonly in the 6 to 15 *thang/rai* bracket (1 *thang* = 10 kg; 1 ha = 6.25 *rai*). (c) The third type is cash rent, indexed to the price of rice. It is also expressed in terms of *thang/rai* and is in fact a variant of in-kind rent (b). The tenant pays the equivalent in cash at the time of harvest. (d) The fourth mode of payment is a simple cash amount (*baht/rai*) stipulated in an agreement.

These contracts differ from each other in terms of absolute rent extraction or year-to-year variability and level of risk upon the contracting parties. In general, it is almost invariably found that rents paid in cash (d) are lower than those paid in kind (b or c). In addition, various studies agree that rents paid per unit of land (b, c or d) are lower under the fixed rent system than under share tenancy (a). For contemporary Asia, fixed rents are 20–30 per cent lower than shared ones and final differences in tenant income average 30 per cent.⁷

The four types of contracts also differ in terms of risk: sharecropping offers greater security to the tenant, as the rent varies according to actual production and incorporates agronomic (pests, diseases) and climatic (flood, drought) risks. Rents based on a fixed amount of rice (whether paid in-kind or in cash equivalent) do not protect against crop failure but offer a gradual buffer against market vagaries. If prices are low, the rent paid by the tenant will also be lower. Finally, fixed rents in cash provide neither of these two kinds of protection against climatic or marketing risks and are potentially the least favourable to tenants in a risk-prone environment. In the event of booming prices, however, fixed cash rent (not readily adjusted) may prove beneficial to tenants, whereas rents in fixed amounts of rice do not allow them to capture the full benefit of the rising values.

7 Keijiro Otsuka and Yujiro Hayami, 'Theories of Share Tenancy: A Critical Survey', *Economic Development and Cultural Change*, 37 (1988): 31–68.

Sharecropping can be viewed in two ways: as a disincentive for the operator, in that the efforts he may make to improve his production are only partly rewarded (what is often dubbed 'the Marshallian' theory) or, as mentioned above, as a protection for the renter against poor yields or crop loss (risk sharing).⁸ Both views are correct but in the pre-irrigation conditions of the Chao Phraya Delta, the second view was more relevant: the risk associated with the hectic hydrological and climatic regime was paramount and was the main concern of farmers.⁹ Jacques Amyot's observations in 1969 of two floating rice areas of Ayutthaya confirm that sharecropping was the preferred practice in areas 'subject to crop damage from flood or drought [as a way to avoid the] danger of incurring in debts in case of crop failure'.¹⁰ Sharecropping has also been shown to be linked with risk-averse farmers in conditions of uncertainty and with social settings favouring the enforcement of contractual stipulations on the tenant's labour input.¹¹

There is little doubt that the disappearance of sharecropping is closely correlated with the gradual stabilisation of production in the delta. The link between the security of water supply and the type of rent has been made clear by Barend Terwiel with regard to a village located 5 km south of Ratchaburi that shifted from the *baeng ha* system to fixed cash rents between 1967 and 1977, and by the contrast demonstrated in the late 1970s by Praipol Koomsup and Boonchui Sreecompon between the rainfed area of Phetchaburi province (95 per cent sharecropping) and the adjacent Mae Klong irrigated area (only 10 per cent).¹² Increased water control in the delta, especially in the last three decades, has contributed significantly to the stabilisation of agricultural production, and share tenancy has virtually disappeared. Recent data (Table 1) confirm that sharecropping is almost a thing of the past in the delta, with only 6 per cent of this type of rent.¹³ Other factors are also responsible for the decline of sharecropping and the rise of cash arrangements replacing in-kind payments. The share arrangement requires that the landlord be physically present at the time of harvest, not only to check the production but also because mechanisation dictates that the rice must be sent directly for milling. This is prohibitive for absentee landowners and, at the very least, inconvenient for local ones.

In the floating rice areas, where inputs in labour and capital were traditionally very low, the disappearance of sharecropping is also clearly associated with an increase in

8 'Sharecropping tends to be regarded as an interesting puzzle by neoclassical economists and as an oppressive form of exploitation by some Marxian economists'; Frank Ellis, *Peasant Economics: Farm Households and Agrarian Development* (Cambridge: Cambridge University Press, 1988), pp. 141-2. Ellis shows how conclusions regarding economic efficiency differ widely depending on whose logic (the tenant's or the owner's) prevails, what is the underlying rationality, and whether or not markets are competitive.

9 J. Homan van der Heide, *General Report on Irrigation and Drainage in the Lower Menam Valley* (Bangkok: Ministry of Agriculture, 1903), p. 30.

10 Jacques Amyot, *Village Ayutthaya: Social and Economic Conditions of a Rural Population in Central Thailand* (Bangkok: Chulalongkorn University Social Research Institute, 1976), p. 104.

11 Otsuki and Hayami, 'Theories of Share Tenancy'.

12 Barend J. Terwiel, 'Development by Fits and Starts: The Case of Baan Wat Saancaw', in *Seven Probes in Rural South East Asia: Socio-Economic and Anthropological*, ed. Barend J. Terwiel (Bihar: South East Asian Review Office, 1979), pp. 25-48; Praipol Koomsup and Boonchui Sreecompon, *Land Tenure, Farm Size and Farm Productivity: A Case Study of the Mae Klong Area* (Bangkok: Thai Khadi Institute, Thammasat University, 1985), p. 112.

13 National Statistics Office *Agricultural Census of Thailand: 1993/Sammano Kankaset Pho. So. 2536* (Bangkok: National Statistics Office, 1995).

production costs. While relinquishing half of the harvest to the landowner may have been acceptable at a time when the tenant basically provided only the seeds and land preparation, it appeared clearly inadequate when tractors became the norm and when the necessity to use fertilisers began to be felt, later in the 1980s. The author and a colleague found that combine harvesters were in use in 72 per cent of the flood-prone area in 1998.¹⁴ With the ongoing process of mechanisation of the harvest, which raised cash expenditures by another 400 *baht/rai*, sharecropping became prohibitive.

Changes in the type of rents also occur in response to the economic situation. During the World Depression in the 1930s, the sudden fall in prices was sharp enough to allow some tenants to obtain a shift from cash rents back to sharecropping.¹⁵ The trend from payment in kind to prepayment in cash observed by Takashi Tomosugi in the 1960s, and subsequently by Akira Takahashi, reflects both the strengthening of the position of landowners as demand for land exceeds supply, and the will of owners to protect their revenue from depressed rice prices (see below).¹⁶ David Gisselquist observed that – for opposite reasons – the rise of paddy prices in 1972–4 was accompanied by a shift away from fixed cash payments towards fixed rice rent arrangements.¹⁷ Interestingly enough, a similar move was observed recently, as a consequence of the boom in rice prices in 1996–8, although the rent is now paid in cash equivalent.

Finally, it is debatable whether fixed rents in-kind or cash rents are more beneficial to farmers. The trade-off between security and benefit, or between the two kinds of rents, depends on their relative value as well as other specific factors such as the degree of capitalisation of the farm (sensitivity to loss). The fact that rents in cash are generally lower than fixed rents in-kind is consistent with this view and suggests that the difference is a ‘measure of the price’ of a higher security against drops in rice prices. In sum, it appears that all of these changes in rental types mirror differentials between the supply and demand for land, and therefore in the bargaining power of contracting parties, the level of risk in production (linked to infrastructure and water control), and changes in rice prices and production costs (mechanisation).

Can a chronological perspective be derived from the historical data presented in Table 1? This is complicated by the mix of local and regional data, but one can attempt, with some reservations on account of the fragmentary nature of the information, to distinguish between our three sub-areas. The East Bank, including Rangsit, has been dominated by rents in cash, although there is some indication that the very first rents may also have been charged in kind. Subvattana Thaveesilp mentions rents of 2.5 *thang/rai* near Bangkok in 1889 and Lucien Hanks reported that newcomers, around 1895, could rent land at 10 *thang/rai*.¹⁸ Rents

14 François Molle and Thippawan Srijantr, *Agrarian Change and the Land System in the Chao Phraya Delta* (Bangkok: Kasetsart University, DORAS Center Research Report, 1999).

15 Prince Burachat, ‘Socio-Economic Impact of the Great Depression on Thai Farmers’, 1932 letter to *Chao Phraya Mahitorn*, translated in *The Political Economy of Siam, 1910–1932*, ed. Chatthip Nartsupha *et al.* (Bangkok: The Social Sciences Association of Thailand, 1981), p. 209.

16 See Tomosugi, ‘Land System’, and Akira Takahashi, ‘Thailand: Growing Land Problems’, in *Rural Employment and Land Reform Policy*, ed. Z. Ahmad (Geneva: ILO, 1976), pp. 77–120 (cited in Douglass, *Regional Integration*, p. 92).

17 David P. Gisselquist, ‘A History of Contractual Relations in a Thai Rice Growing Village’ (Ph.D. diss., Yale University, 1976), pp. 160–1.

18 Subvattana Thaveesilp, ‘Kanphalit lae kankha khao nai Phak Klang tangtae ratchasamai Phrabatsomdet Phrachulachomkiao Chaoyuhua Ratchakan thi 5 chontheuang ratchasamai Phrabatsomdet Phrapokkiao Chaoyuhua Ratchakan thi 7 [Rice production and rice trade in Central Thailand from the reign of King Rama V to the reign of King Rama VII]’ (Ph.D. diss., Chulalongkorn University, 1978), p. 107; Lucien M. Hanks, *Rice and Man: Agricultural Ecology in Southeast Asia* (Honolulu: University of Hawaii Press, 1972), p. 99.

in-kind were perhaps to be found in arrangements between farmers, while landlords collected cash through their local agents (*naikong*). As absentee landlords predominated in the area, cash rents were the rule at least until World War Two, when a shift towards fixed rice rents was observed. These rents later ended up being paid in cash equivalent.

In the flood-prone area, there are references to cash rents in Ayutthaya in 1909 and 1930, but it is believed that sharecropping was also found in older settlements of these areas and later combined with fixed rice rents.¹⁹ These eventually gave way to cash-equivalent rents which, pooled with fixed cash rents, gave a total of 47 per cent of rents paid in money in the 1950 census for Ayutthaya province. However, sharecropping maintained its proportion of between one-third and two-thirds until the early 1980s when, for the reasons mentioned earlier, it gradually gave way to fixed rice rents. Sharecropping first declined in Ayutthaya province (only 25 per cent in 1978, against 38 and 54 per cent in Singburi and Ang Thong provinces respectively),²⁰ where the surge of absentee landlordism was felt first.

In the upper delta and Mae Klong area, tenancy was not widespread until World War Two. Since that time, both cash and fixed rice rents have been found in comparable proportions, although location and temporal variations are significant. Tomosugi observed the shift towards (pre)payment in cash in the 1960s. It seems that some opposite trends occurred in periods of appreciation of prices, such as in 1973 or more recently in 1997.²¹ Rents in cash and fixed amounts of rice (now paid in cash equivalent) are observed in all parts, even though the former seem to prevail slightly. Rents in kind are now rare to exceptional in the delta.

Contract covenants

The first evidence gathered in the 1950s and 1960s – except in the case of Rangsit, which was much earlier – repeatedly points to precarious contractual arrangements regarding the leasing of land. In four villages of Saraburi and Nakhon Nayok provinces surveyed in 1954, no written contracts were reported. Similarly, Amyot found almost no formal contracts in Ayutthaya in 1969. In 1964, 52 per cent of full tenants had no written contracts; this rate was found to be as high as 68 per cent in a wider survey of eleven provinces undertaken one year later. Tomosugi, however, considered that the late 1960s saw an increase in the use of written contracts and estimated their frequency at more than 50 per cent.²² Later surveys in 1976 (in the Mae Klong Basin) and in 1978 (Nakhon

19 See Steven Piker, *A Peasant Community in Changing Thailand* (Tempe: Arizona State University, 1983); references to 1909 and 1930 are from Subvattana, 'Kanphalit lae kankha khao', p. 108, and Carle C. Zimmerman, *Siam: Rural Economic Survey: 1930-31* (Bangkok: Bangkok Times Press, 1931) respectively.

20 National Statistics Office, *Agricultural Census of Thailand: 1978/Sammano Kankaset Pho. So. 2521* (Bangkok: National Statistics Office, 1980).

21 See Gisselquist, 'History of Contractual Relations', pp. 160-1, on the 1970s.

22 Tomosugi, 'Land System', p. 303 (1954 data); Amyot, *Village Ayutthaya*, p. 100 (1969 data); 1964 figures are from Chaiyong Chuchat *et al.*, *Rainan setthakit thidin reuang khwamsamphan rawang kantheukhrong thidin kap phawa kanphalit khong chaona nai 5 changwat Phak Klang Pho. So. 2507* [Economic report on the relationship between land holding and production conditions of the farmer in 5 Central provinces, 1964] (Bangkok: Department of Land Development, 1965) (henceforth *5 changwat*), p. 62; 1965 figures are from Chaiyong Chuchat *et al.*, *Khwamsamphan rawang kantheukhrong thidin kap phawa kanphalit khong chaona nai 11 changwat Phak Klang Pho. So. 2508* [Relationship between land holding and production conditions of the farmer in 11 Central provinces, 1965] (Bangkok: Department of Land Development, 1969) (henceforth *11 changwat*), p. 57.

Pathom province) found percentages of only 22 and 27 per cent respectively, while a similar survey carried out in the Don Chedi Project gave a more balanced picture of 46 per cent.²³

Today, verbal contracts are still the rule and written contracts mostly occur when renting land from non-relatives (especially absentee owners) or when specific security is needed (as in the case of shrimp farming). Recent surveys in three villages of the delta also suggest that written contracts are becoming rare: out of 90 rental arrangements, only 12 per cent were based on a written contract.²⁴ However, there is little evidence that verbal contracts are perceived by farmers to be precarious; we will return to this point later.

Most of the observations gathered throughout the century emphasise the prevalence of year-to-year contracts. In 1964, 79 per cent of the lease contracts were found to be on the basis of a one-year agreement, with no formal security regarding the renewal of the term. This rate was as high as 87 per cent the following year, while a similar picture was given by the 1978 Department of Land Development surveys in two irrigation projects (10–15 per cent of contracts over one year).²⁵ Recent investigations suggest that this pattern has gone unaltered and that at present most contracts are either for one year (regardless of whether they are verbal or written) or unspecified (between relatives).

Rental contracts often include a series of other variations and secondary covenants. The most important issue is whether the rent is to be paid in case of crop failure. In the early days of rice expansion, at least during the recession of 1905–12, landlords showed little flexibility, in a bid to limit the impact of the Depression on their own revenues (see below). A similar picture was observed in the Depression of the 1930s, resulting in growing indebtedness. The surveys of the 1960s also conveyed a gloomy picture: the period was characterised by a shift in the ‘terms of trade’ between landlords and tenants due to the high demand for land, which translated into lesser leniency on the landlords’ part. In 1965, for example, two-thirds of tenants still had to pay the full rent in the case of crop failure and 29 per cent only part.²⁶ James Scott has demonstrated how such exigencies have a deleterious impact on the economic subsistence of tenants.²⁷ Although the data are inconclusive, this situation was probably found chiefly in the flood-prone and upper delta area. In the landlord area of the East Bank, Tomosugi found that the *naikong* were granting reductions and exemptions.²⁸ Nowadays, most farmers report that they benefit from one of these two measures in the case of crop failure.

Some agreements may also specify the time of payment (before the season, after harvest or after selling the produce). As observed earlier, prepayment is extremely rare today. Tomosugi noted that in 1968 there was ‘a recent conspicuous trend from payment

23 Praipol and Boonchuai, *Land Tenure* (Mae Klong); Department of Land Development, *Report of the Land Tenure Survey, Phanom Thuam Irrigation Project* (Bangkok: Department of Land Development, 1978) (Nakhon Pathom), and idem., *Report of the Land Tenure Survey, Don Chedi Irrigation Project* (Bangkok: Department of Land Development, 1978).

24 François Molle et al., *The Impact of the Access to Irrigation Water on the Evolution of Farming Systems: A Case Study of 3 Villages in the Chao Phraya Delta* (Bangkok: Kasetsart University, DORAS Center Research Report, 2001).

25 See Chaiyong et al., *5 changwat*, p. 62, and *11 changwat*, p. 57; Department of Land Development, *Report of the Land Tenure Survey, Don Chedi*, and Chaiyong et al., *Report of the Land Tenure Survey, Nakhorn Chum Irrigation Project* (Bangkok: Department of Land Development, 1978).

26 Chaiyong et al., *11 changwat*, p. 60.

27 James Scott, *The Moral Economy of the Peasant* (New Haven: Yale University Press, 1976).

28 Tomosugi, ‘Land System’, p. 305.

in kind to prepayment in cash' in the upper part of the delta. In the 1964 Five Province Survey, 35 per cent of rents had to be paid in advance, but this percentage was only 11 per cent in the subsequent and wider 1965 survey of eleven provinces.²⁹

Contracts may include a great variety of other stipulations, such as specification of who pays the land tax, whether equipment for land preparation is borrowed (only 1 per cent in the 1950 census), whether cash is advanced for purchasing fertiliser, etc. While it was common in the past for tenants to borrow money from their landlord, this has now become rare, as cooperatives and banks provide the bulk of the working capital.

Social relationships between contracting parties

The types of arrangement, the amount of the rent and their socioeconomic meaning are also dependent on the degree of social proximity between the landowner and the tenant. As Mark Cleary and Peter Eaton have shown, what matters is who is the owner, rather than tenancy in and of itself.³⁰ We can distinguish here between three types of landlords.

Rental arrangements between relatives tend to be the most common, sometimes on a free or loose reward basis. A significant part of the land rented by farmers belongs to siblings who have inherited their share of land but migrated to cities. The 1965 survey revealed that 37 per cent of all owner-tenants and 31 per cent of all tenants rented their land from relatives or parents (with another 30 per cent of contracts being between neighbours).³¹ The frequency of agreement between relatives is typically higher further away from the heart of the delta. In 1967 in Hua Kok, Jeremy Kemp observed that 'the great majority of contracts are between people who know each other fairly well and just over half of those recorded were between people considered to be true kinsmen including affines'.³² A study carried out in 1979 in the Mae Klong area showed that up to 55 per cent of farmers rented land from relatives. Numerous other studies are consonant with these results and point to a rather stable share of rental agreements between kinsmen (around 55 per cent).³³

Even in the case of lease arrangements between relatives, however, there is no regularity in the rents; they are sometimes rather low, but this is not always true. One such case occurs when the landowner is in a favourable economic position (he may have a lot of land or other economic activities) and a low rent reflects his solidarity with a less

29 Ibid., p. 306; data from Chaiyong *et al.*, *5 changwat*, p. 64 and *11 changwat*, p. 60.

30 Mark Cleary and Peter Eaton, *Tradition and Reform: Land Tenure and Rural Development in Southeast Asia* (Kuala Lumpur: Oxford University Press, 1996).

31 Chaiyong *et al.*, *5 changwat*, p. 56.

32 Jeremy Kemp, *Hua Kok: Social Organization in North-Central Thailand* (Canterbury: University of Kent at Canterbury, CSAC Monograph, 1992), p. 124.

33 On Mae Klong, see Praipol and Boonchui, *Land Tenure*; other studies include Shigeharu Tanabe, 'Rice Growing Technology and Land Tenure in the Chao Phraya Delta: A Case Study in Phakthan, Singburi Province', in *A Comparative Study of Paddy-Growing Communities in Southeast Asia and Japan*, ed. Masuo Kuchiba and Leslie Bauzon (Kyoto: Ryukoku University. Toyota Foundation, 1978), pp. 1-39; R. Visser, 'Aspects of Social and Economic Change in a Village in the Central Plain of Thailand', paper presented at the Thai-European Seminar on Social Change in Contemporary Thailand, University of Amsterdam, 1980; Pascale Phelinas, 'Progression du front pionnier et évolution des modalités d'accès à la terre en Thaïlande' (mimeographed paper from Société Française d'Économie Rurale, 1993); Akimi Fujimoto and Toshiro Matsuda, *A Study of Rice Productivity and Rural Society in Three Thai Villages* (Tokyo: Tokyo University of Agriculture, 1987); and Molle *et al.*, *Impact of the Access*.

fortunate relative. In the second case, the owner needs some help; typically, he is too old to farm and has limited revenue and the relative who rents the land does so willingly, with the primary intention of providing substitute labour and not of benefiting financially. Sharecropping is often practised in such situations, as indicated by David Gisselquist's finding that such arrangements are commonplace between close relatives.³⁴ Because these rental arrangements – even when expressed in cash units – are still marked by non-commercial social dimensions, they cannot be understood from only an economic standpoint. R. Visser also reported some examples of transactions between villagers and views many of them as not being purely commercial, given that in many rental arrangements between relatives 'no clear arrangements are made about the price or the length of the agreement'.³⁵

A second substantial category of contracts includes those established between villagers and absentee landlords, who generally reside in the capital or in provincial centres. Contrary to popular belief, these landlords tend to be more lenient than landowners living in the community.³⁶ Avoiding the burden of controlling farmland use, they are generally content with rather low rents, typically the equivalent in cash of 5-10 *thang/rai*, while typical rents usually vary between 10-15 *thang/rai*, often irrespective of the number of crops grown on the plot during the year. Arrangements tend to be stable and are always in cash, as they are not interested in collecting paddy rice.

It should be noted that in the land administered by the Crown Property Bureau (royal land [*naa luang*] amounts to a significant share of 'the landlord area'), rents are generally set at 100 *baht/rai*, or even less in some flood-prone areas around Ayutthaya; these constitute exceptionally favourable rates. Rates are also commonly found to be very low in land belonging to local governments or temples.³⁷

A third category is that of contracts made among local farmers. These arrangements frequently occur when the landowner leases all of his land, either because he has other occupations or because of advancing age. These contracts generally provide for the closest to the maximum return allowed by market conditions. This is the least favourable to tenants because the transaction is purely commercial and – in some instances – because the landowner (an older farmer, for instance) has few alternative sources of income. This statement must be qualified by the fact that some of these rental arrangements come under the general category of patron–client relationships, even though such traditional social ties have been weakened significantly.

Table 2 shows graphically how different ecological environments, which dictate different evolutions of farming systems, are characterised by contrasting types of landlords. In a village of Suphanburi province growing three crops of rice per year, landlords are predominantly relatives who live nearby or in the province and who used to be farmers. In a village of Ayutthaya that mostly grows one crop of floating rice per

34 Gisselquist, 'History of Contractual Relations', p. 163.

35 Visser, 'Aspects of Social and Economic Change'.

36 See Kamol Janlekha, 'A Study of a Rice Growing Village in Central Thailand' (Ph.D. diss., Cornell University, 1955); L.D. Stifel, 'Patterns of Landownership in Central Thailand during the Twentieth Century', *Journal of the Siam Society*, 64 (1976): 237-74; Yongyuth Chalamwong and Gershon Feder, *Landownership Security and Land Values in Rural Thailand* (Washington, DC: World Bank Staff Working Paper, 1986); and Phelinas, 'Progression du front pionnier'.

37 Shigeharu Tanabe, *Ecology and Practical Technology: Peasant Farming Systems in Thailand* (Bangkok: White Lotus, 1994).

year and where a significant percentage of the villagers work in factories or have emigrated, landlords have no family links with tenants in half of the cases and live in Bangkok or other cities. In an intermediate situation, where a degree of rice cropping is possible in the dry season, a village in Lopburi province shows a more heterogeneous pattern but landlords also tend to be relatives living in the vicinity.³⁸

A recurring question relates to the alleged precariousness of rental contracts.³⁹ This commonly negative perception persists despite the lack of convincing evidence that verbal year-to-year informal contracts are considered precarious by farmers, except in the case of Rangsit up to the time of World War Two. What should be emphasised is both the stability of contracts and the tacit recognition by the village community of the proper behaviour in such issues. This is shown by most village studies, in particular that of Akimi Fujimoto, who recorded 'no serious complaint from tenants' and perceived tenancy relations to be 'relatively stable and secure'.⁴⁰ Trust is an important element of rental arrangements, irrespective of the nature of the landlord, for several reasons. First, more than half of the rental contracts have been shown to occur between relatives; Kemp's observation that 'kin do not cheat one another and so find it unnecessary to make formal agreements' is corroborated by all the village studies.⁴¹ Second, if the landlord is a local farmer, then he is unlikely (as is the contractor) to willingly engage in some misconduct that would tarnish his reputation and establish his untrustworthiness, a point strongly emphasised by several sources.⁴² Even when the two parties are not relatives, agreements are sometimes based on a patron-client pattern and, unless one contracting party feels that the arrangement is not fruitful, there is no incentive to break it from either part. Yujiro Hayami and Masao Kikuchi have also stressed the peculiarity of what they dub a 'personalised market': 'it usually entails a significant cost to violate time-honoured village rules. Even if one expects large material gains from violating the rules, he may not dare to do so because of the risk of social opprobrium and perhaps

38 For more details on the comparison of these villages, see François Molle *et al.*, 'Balance and Imbalances in Village Economy: Access to Irrigation Water and Farming Systems in the Chao Phraya Delta', paper presented to the 8th Thai Studies Conference, Nakhon Phanom, 9-12 January 2002.

39 Almost all documents relative to land tenure problems mention this point without questioning it. See, for example, Zimmerman, *Siam: Rural Economic Survey*; Witayakorn, *Effects of Capitalist Penetration*; Turton, 'Situation in the Thai Countryside'; and Friedrich Fuhs and Jan Vingerhoets, *Rural Manpower, Rural Institutions and Rural Employment in Thailand* (Bangkok: National Economic Development Board, 1972).

40 Fujimoto and Matsuda, *Study of Rice Productivity*, p. 33.

41 Kemp, *Hua Kok*, p. 125. To some extent, this also holds true for borrowing among members of a village or community. Few individuals default because 'non-repayment precludes additional loan and results eventually in the person being socially ostracized' (Gisselquist, 'History of Contractual Relations', p. 212). Amyot also stresses that 'farmers tend to have stable relationships based on friendship and trust with specific individuals in their various roles and these relationships tend to be highly personalised' (*Village Ayutthaya*, p. 159).

42 Gisselquist, 'History of Contractual Relations'; Amyot, *Village Ayutthaya*; Charles B. Mehl, *If There Was No Land to Clear Anywhere? Social and Cultural Aspects of Land Inheritance and Transactions in Rural Thailand* (Washington, DC: World Bank Agricultural and Rural Development Research Unit Discussion Paper, 1986); and Howard Kaufman, *Bangkhuad: A Community Study in Thailand* (Locust Valley, NY: Augustin, 1960). During the author's fieldwork, when asked what would happen if some landowner should displace a tenant to give the land to another one at a higher price, villagers answered that the landowner would be disgraced in front of the village and that 'should the new tenant belong to another village, for sure he would not dare come to harvest the plot...'

ostracism.⁴³ The high cost of violating rules for both parties indicates that relationships are not critically unbalanced.

A third factor is that absentee owners are known to be lenient rather than aggressive. This was already perceptible in the 1960s with regard to Bangkok-based landlords. Their leniency and the low rents demanded showed that they had already given up their interest in maximising their rent because of the high social and transaction costs for monitoring and enforcing contracts, and because of the growing value of land itself, which provided a return to capital that totally offset the revenue from the rent. More generally, this tendency can be ascribed to a growing range of opportunities for capital investments that were surfacing at that time. An example of stability is given by the landlord area of Chachoengsao province, on the East Bank: Although contracts are year-by-year (but most often written), families often farm the same landlord's land for generations and their 'right' is transmitted to their descendants. Such 'hereditary tenancy' has also been reported in the eastern part of the delta.⁴⁴

In all cases, short-term contracts also appear to be consistent with fluctuating rice prices. Tenants are not willing to commit themselves for a long period in which profitability could turn out to be low and risk high. Amyot noted that tenants would also consider from year to year whether they had the capacity to operate the rented land and could thus terminate the agreement if they judged that the plot was eventually too far or not fertile enough.⁴⁵

The value of rents and their historical changes

At this stage, we have identified a rather disconcerting variability in rent values⁴⁶ that reflects a series of factors and conditions:

- (a) The personal relationships between the owner and the tenant, and the status of the former (absentee, relative, farmer/non-farmer, etc.).
- (b) The relative scarcity of land, which in turn is strongly correlated with the price of rice (if the price is good, it is very hard to find land to rent and vice-versa), with land productivity, and more generally with agrarian pressure (land per capita).
- (c) The type of payment, kind or cash (involving different measures of risk).
- (d) The type of rice (irrigated/deep water) and, more generally, the level of water control (access to irrigation water and drainage conditions) and risk in production.

43 Yujiro Hayami and Masao Kikuchi, *Asian Village Economy at the Crossroads: An Economic Approach to Institutional Change* (Tokyo and Baltimore: University of Tokyo Press and Johns Hopkins University Press, 1982), p.17.

44 Naruemon Bunjongjit, 'Landowner-Labour Relationships in a District of Rural Central Thailand', *Journal of Social Sciences Research*, 10, 1-2 (1987): 98-115. It is worth noting that absentee ownership is not necessarily an obstacle to the spread of intensive activities requiring transformation of the land, as shown by shrimp farming in Chachoengsao province or Bang Len district in Nakhon Pathom. The year-by-year stipulation is said to be a consequence of the restriction imposed on contracts of a longer duration: farmers have the right to farm the land for another six years after the landlord announces his or her desire to get the land back. To evade this constraint, they prefer to establish year-to-year contracts.

45 Amyot, *Village Ayutthaya*, p. 101.

46 A good example of this variability can be found in the statistics given for 1975 in Suthiporn Chirapanda, 'Land Tenure Systems in Thailand', in *Land Tenure and the Small Farmer in Asia*, ed. Jan Bay-Petersen (Taipei: Food and Fertiliser Technology Center for the Asian and Pacific Region, 1983), pp. 60-84.

- (e) The projected land use, i.e., the opportunity cost of land in agriculture. Land rents of plots used for field crops or aquaculture, for example, are typically two to ten times higher than for rice.

We now turn to examining the share of the surplus produced by the tenants that was extracted by the landlords, to see whether we can discern some overall historical trend in real rents despite the numerous variables.

While the literature frequently mentions extortionate sharecropping at one half of the crop or more, some authors have also suggested that rents are generally, on the average and despite exceptions, not extortionate. L.D. Stifel's study of four villages in Nakhon Pathom and Ayutthaya provinces found that 'the structure and conduct in the operations of the agricultural land market suggest tentatively that the landlords are not exploiting the farmers by charging rentals over the competitive norm'.⁴⁷ Praiporn and Boonchuai report that when asked about their opinion on the rent they paid, one-third of the farmers found it to be too high while two-thirds responded, 'fair (just right)'.⁴⁸

The dominant impression is one of an extremely flexible market, where demand is dependent on land scarcity and rice prices. Rents can be adjusted accordingly – although they appear to be somewhat 'sticky' – by changing either the type of rent or its nominal value. The possible combinations of the above parameters dictate a diversity of situations and limit the impact of a longitudinal analysis. However, based on a comprehensive collection of historical observations (pooled in the tables at the end of the article), I will venture a comparison of rents along time and of their relative burden for the tenant.

Fixed rents in kind

Rents expressed in terms of amount of rice can generally be found in the range of 6–20 *thang/rai*, but most commonly around 10–15 *thang*, despite the drastic gains in productivity that have doubled average yields from 35 *thang* to 75 *thang/rai* (irrigated areas) in the last thirty years. It is not easy to distinguish between the different rice-growing environments because data are too fragmentary and do not always specify the type of rice.

Very few data are available for the flood-prone area and it is not possible to derive a reliable time series. What seems to be of little doubt is the increase in rents in the 1960s and 1970s, which can be ascribed to pressure on land and to a significant increase in landlordism in that particular area. Quantitative data are highly variable and include rents between 10 and 20 *thang/rai* in Lopburi and Ang Thong provinces in 1952, and rents in kind averaging 6 *thang/rai* in the Five Province Survey of 1964 that encompassed Ayutthaya and flood-prone areas of Lopburi and Nakhon Nayok provinces. Higher values were observed in 1969 in Ayutthaya by Amyot (around 12–15 *thang/rai*) and in 1968 by Tomosugi (20 *thang/rai* in areas with productivity of around 40–50 *thang/rai*).⁴⁹ This most vulnerable area (lower yield, higher risk) was subject to exploitative rents during this period, but this situation has been partly reversed, with rents now most commonly around 10 *thang/rai*. The author's own survey in the flood-prone area of Ayutthaya province found an average rent of 9 *thang/rai*. Increased cash inputs, however,

47 Stifel, 'Patterns of Landownership', p. 265.

48 Praiporn and Boonchuai, *Land Tenure*, p. 114.

49 See Amyot, *Village Ayutthaya*, p. 103, and Tomosugi, 'Land System', p. 306.

keep the profitability of rice low in this area. It should be noted that there was a slight decrease in rents consecutive to two years of floods (1995-6), indicative of a decline in demand.

In the non-flood-prone part of the upper delta, rents appreciated in the 1960s and appear to have been rather stable since then, with 15 *thang/rai* being the most common value. A similar stability can be found on the East Bank but rents are much lower, usually between 6 and 10 *thang/rai*. This stability of the nominal rent together with the increase in yields, however, does not translate directly into an effective diminution of the rent burden; production costs have also increased tremendously and the calculation requires further caution. Table 3 attempts to compare the evolution of the rent burden over the years.⁵⁰ It reveals that the stable rents of the East Bank imply a decrease in real rent from 44 to 20 per cent of the net cash income per *rai*. The situation is similar for the upper delta: Although the rent represents a share of 20-31 per cent of the harvest, its real value – expressed in percentage of cash income – first increased from 1950 to the 1970s, then declined from 44 per cent in 1971 to today's 30 per cent.

Fixed rents in cash

It is not easy to derive a clear picture of the East Bank during the period 1880-1920, when cash rents first appeared and became the rule. David Johnston refers to a rent of 3 *baht/rai* set by the Lamsai Company (after two years in which rents were lower or sometimes nil), which represented one-sixth of the gross value of total production. In 1902, the Rangsit Company is reported to have offered rents at 4 *baht/rai* (with two initial years of lower rents). With farm-gate prices at around 70 *baht/tonne* and yields between 20 and 25 *thang/rai*, rents thus represented a share of 23-28 per cent of the paddy value.⁵¹

Average values, however, are unable to capture the complexity of widely varying conditions reflecting above all the risk factor. Writing at the very beginning of the last century, H. Van der Heide reported that

land is cheapest in price and rent in the high tracts near the river and the value in general continually increases towards the lowest middle parts, where flooding is of longest duration. This difference in several cases amounts to this proportion that people pay for the lowest lands 9 to 10 ticals [*baht*] rent per *rai* and for land near the rivers 1 to 2 ticals.⁵²

Unfortunately, data on cash rents during the first half of the century are scarce. Surveys conducted in the 1930s provide no detailed information, but the few historical observations given by Subvattana for the period 1906-22 period show that, depending on the quality of land, rents varied between 1 and 4 *baht/rai*.⁵³

The situation in the 1960s is reported by the Eleven Province Survey. Rents in the upper delta were in the 90-100 *baht/rai* range, while landlord areas (Bangkok, Thonburi,

50 These calculations are tentative: results are of course sensitive to the assumptions made about average yields, costs and rents. However, these average values have been estimated based on all the historical data available to the author. Adjusting yields and costs does not alter the historical declining trend evidenced in the table.

51 Johnston, 'Rural Society', p. 111, and Feeny, *Political Economy*, p. 135.

52 Van der Heide, *General Report*, p. 30.

53 Subvattana, 'Kanphalit lae kankha khao', pp. 107-8.

Chachoengsao) had lower rents, between 25 to 60 *baht/rai*. It seems that 100 *baht* and 50 *baht* were fair averages of rents for the upper delta and landlord areas respectively in the mid-1960s, but payment in kind was most common. With the intensification starting in the early 1970s, rents rose quite rapidly to 150-200 *baht/rai*.⁵⁴ In the late 1980s, rents were around 400 *baht* and today they hover around 500 *baht* (with great variability). In the flood-prone area, rents are generally 20 per cent or more lower, but correspond to a higher share of income. Even with the higher prices obtained in the last four years, it seems that rents have not caught up with the hike and have remained at around 500 *baht/rai* for HYV (high-yielding varieties) and 320 for traditional varieties (equivalent to 10 *thang/rai* with prices higher than 4.5 *baht/kg*).

Despite difficulties in defining average yields, production costs and rents, Table 4 suggests that real fixed cash rents have decreased over time. Expressed in amounts of paddy, rents remained generally in the 8-13 *thang/rai* range, with a drop after World War Two (4 *thang/rai*) and a peak in the early 1970s. Given the increase in productivity, however, the trend represents a declining share of the harvest, from 25 per cent after the war to today's 11 per cent, with a peak of 33 per cent around 1970. This crisis period appears as one in which rents were rising, productivity was stagnating and real rice prices were at their lowest. Therefore, the rent burden was high both in terms of production and in economic terms. Table 4 also indicates that the rent expressed in percentage of the cash income per *rai* (rental not yet included) dramatically declined from 48 per cent to 17 per cent.

Landowners vs. tenants: changing terms of trade

The preceding sections have shown that contract types and the value of rents are complex, multi-faceted and fluctuating. They are shaped strongly both by local factors (social proximity, ecological conditions, risk) and by the wider socio-political and economic context (rice prices, pressure on land and labour markets, democratisation, etc.) which defines an overall 'balance of power' between landowners and tenants. Drawing on the analyses made in the above sections, I attempt here to periodise the evolution of landowner-tenant relationships over the course of the twentieth century. I will then show that this evolution has been affected only slightly by policies and laws.

Early years of rice expansion

During the early years of the East Bank development around 1880-95, 'landlords who invested in the area had been forced to compete among themselves for the limited number of available tenants' and many offered to collect no rents at all during the first years of cultivation. Farmers 'were usually treated sympathetically by landlord and *naikong* (overseers) alike', who were also reported in an official document 'to be kind to the farmers'. Labour was lacking and wages were rather high, especially when compared with the price of land.⁵⁵ This situation dramatically emphasises how a few years before

54 For the 1960s, see Chaiyong *et al.*, *11 changwat*, p. 58; studies from the 1970s include Tanabe, 'Rice Growing Technology'; Gisselquist, 'History of Contractual Relations'; and ILACO (International Land Development Consultant), *Chao Phya Irrigated Agriculture Development Project, Feasibility Study-Stage II* (Bangkok: ILACO, 1975).

55 The comment on being 'kind to farmers' is found in a letter from *Phra* Ratphunphiphat to the Director of the Department of Revenue, May 1906 (National Archives, Fifth Reign, Ministry of Agriculture, 3.1/1); other quotations are from Johnston, 'Rural Society', p. 242. Around 1890, the daily

the total abolition of bondsmanship, the nobility had already lost most of its power over its retainers. This imbalance proved to be short-lived, as by the late 1890s the flow of tenants to the East Bank was high enough to reverse the situation, one landlord later recalling that aggressive tenants 'bid against each other for this rich land'.⁵⁶ This gradually shifted the terms of trade in favour of the landlords, and the 1905-12 Depression, mostly due to a series of climatic catastrophes, brought an end to euphoria, critically straining the relations between landlords and tenants.

Landlords for some time bet on the hardship of the land frontier in order to retain their tenants or labourers and used debt as an indirect way to attempt to control labour. In a bid to stabilise their income at the expense of their tenants, landowners left farmers with levels of income below subsistence and eventually triggered a flow of emigration, indirectly fuelling the reclamation of the delta. They also ended up undermining their own interests because, as became apparent a few years later, they had gone as far as to reverse the terms of trade: by 1910, many 'watched helplessly as the fields (left uncultivated) were encroached upon by elephants again, which [had been] driven out some years ago' and had to offer land to rent for free, provided that the tenant would pay the land tax.⁵⁷ What became clear was the limitation on the landlords' bargaining power because of the possibility for tenants to simply migrate to new lands – their debts most often unpaid – should they find their situation unbearable or unacceptable. This phenomenon was in fact observed in the succeeding years, with farmers receding in unexpected numbers, prompting a reversal of the migration trend and a decrease in the population – by 40 per cent in six years in one district! In such an unstable situation, rental contracts were precarious, already often paid in cash, and varied widely with the degree of water control.

A slightly different scenario occurred twenty years later, after the World Depression. With a slump in rice prices by 40 per cent, indebted tenants were caught unawares. While the first crisis was due mainly to excessive internal euphoria and climatic vagaries, the second depression revealed the vulnerability of the rice economy to the world demand and the price of rice. It seems that the terms of trade before the crisis had not swung back totally in favour of the landlords, that the reclamation of the delta had proceeded and – with the exception of some areas of older occupation in which some congestion was already felt – there was still land available in many parts of the region and landlords were probably still unable to fully control their tenants.⁵⁸

This situation was heightened by the crisis. While in the first depression landlords had stiffened their position and shown little flexibility, in the post-1929 period 'there was a move hardly voluntary on part of the landlords to reduce land rentals proportionately to the declining price of paddy'.⁵⁹ In Ang Thong province, 'in 1931, farm renting declined wage represented 15 kg of rice but declined to 7 kg as early as 1896. Seasonal wages amounted to 80 *baht*, while common prices for land were between 1 and 5 *baht/rai* (Feeny, *Political Economy*, pp. 132-4).

⁵⁶ Johnston, 'Rural Society', p. 316.

⁵⁷ *Ibid.*, p. 312.

⁵⁸ 'Tenants are able to select lands at will. If a tenant becomes dissatisfied, he may pack up and move to rent another plot, because there is much vacant land. Some tenants need not even pay rent. After farming a plot, they simply desert it. The landlord lives far from his fields, and is not aware of these events. Only when he is required to pay the land tax in place of the tenant farmer does he discover that someone farmed his land without his permission'; an official in 1926, quoted in *ibid.*, p. 421.

⁵⁹ Virginia Thompson, *Thailand: The New Siam*, reprint edn (New York: Paragon Book Reprint Corporation, 1967), p. 320.

and sharecropping contracts were made instead with the land-owner generally getting half the amount of rice because rice prices were uncertain. It was learned that farmers would not pay the rent in cash any longer unless the land-owners charged lower rates which farmers could afford to pay.⁶⁰ Another hint at the limited coercive power of landlords comes from James Andrews in 1936, who states that tenants did not renegotiate contracts because 'they knew that if they didn't earn the rentals, no power on earth could make them pay what they did not have'.⁶¹

Even the bargaining power of moneylenders does not seem to have sufficed to protect their interests. Johnston holds that contrary to common belief, land foreclosure was more common before the crisis than after, as in the face of falling land values in Ang Thong moneylenders 'were now reluctant to foreclose on them because land values had fallen far below the amounts of the original loan and *because most would have been unable to turn the land to any profitable use*': owning land of decreasing value, without the proper labour force to farm it, in a time in which no one is willing to pay rent because of the low profitability of rice, appears to be of little benefit.⁶² Regarding the situation on the East Bank, in the 1930s Zimmerman described the same precariousness reported at the beginning of the century, with tenants who often 'do not pay the rent or the taxes if they can move away to another place'. This description is echoed by many later observers.⁶³

The post-World War Two period and the making of the 1970 crisis

This takes us to the post-war period when the land market was affected by the dislocations of the war and by the surge of banditry, which created havoc and allowed some individuals to strengthen their control over land resources, notably the village headmen who were in charge of land rights.⁶⁴ A dramatic population increase and a subsequent growing pressure on land contributed to the stagnation of the 1960s and early 1970s. The land question was the most sensitive aspect of the greater agrarian crisis brought about by a combination of factors. These included the closure of the upland frontier, high population growth (3 per cent per year), low and stagnating yields, depressed rice prices and income and mounting debt.

Farmers' protests concentrated on the price of rice, tenure security (mostly in the Central Plain) and indebtedness. What were the relationships between landlords and tenants during this period? It is likely that similar to what was observed in the 1905-12 depression, the terms of trade had moved in favour of landlords, who strengthened their grip on the peasantry through moneylending and the peasants' subsequent indebtedness. As noted above, real wages reached their highest values during that time and prepayment in cash came to be required by many landlords. The unexpectedly (and transient) high percentage of 48 per cent of written rental contracts found in the 1964 five-province survey is also indicative of growing tensions that demanded more security in contracts.

60 Prince Burachat, 'Socio-Economic Impact', p. 209.

61 James A. Andrews, *Siam: Second Rural Economic Survey, 1934-35* (Bangkok: Bangkok Times Press, 1935).

62 Johnston, 'Rural Society', p. 410; emphasis added.

63 Zimmerman, *Siam: Rural Economic Survey*, p. 307. See also Thompson, *Thailand: The New Siam*; Robert L. Pendleton, *Thailand: Aspects of Landscape and Life*, reprint edn (Westport, CT: Greenwood Press, 1976); and *Agricultural Development of Thailand* (Bangkok: ESCAPE/FAO, 1955).

64 Gisselquist, 'History of Contractual Relations', for example, shows that half of the land in Wang Nam Yen village (Ang Thong province) changed hands from 1945 to 1955 (p. 31).

The reason for this imbalance can be traced to the growing pressure on land (the out-migration to the upland frontier observed in the 1960s was waning, and labour was available in excess as the impact of high population growth became manifest), and to the appreciation of land resulting from implementation of the irrigation system.

Excessive rents, denounced in farmers' protests in 1974 (discussed below), did not concern the entire delta and were found especially in the flood-prone area, where little intensification was possible because of environmental constraints. It is all the more likely that the rent burden was chiefly a direct consequence of the extremely depressed rice prices – farm-gate prices dropped to 630 *baht*/tonne in 1970/71, the lowest real price in the second half of the century, and in 1972/73 extensive crop failures were also registered – and of growing indebtedness that made the situation unbearable for many. The 1974 protests drew attention to cases of abuse (high rents, foreclosure) by some landlords. These local landlords, who had often thrived on moneylending and accumulated land, later turned themselves – or their children did so after achieving higher education levels – to more profitable investments (transport, commerce, construction, education of their families, etc.) and moved away from villages to cities, and from the agricultural sector to other activities. Thus, both their interest in rents and the capacity to enforce contracts declined, as in the case of the Bangkok-based landowners mentioned earlier. At the same time, several other factors contributed to bringing relief to the deltaic agrarian system, in particular soothing the tensions on the land market, as shown by the decline in real rents. HYVs and irrigation allowed for double cropping of rice and perennial crops, the rice price appreciated, institutional credit became available and population growth was curtailed from 3 per cent down to 1.7 per cent in 1985.

Over the last two decades, a relative equilibrium has prevailed in the land rental market. Again, spatial heterogeneities are prominent and depend on population density, the availability of other job opportunities and the productivity of land. In addition, the demand for land is correlated closely with the price of rice and adapts rather quickly to it. The severe floods of 1995 and 1996 had a dramatic impact on the most fragile environment of the delta, and the dwindling enthusiasm of many tenants (and some owners alike) who gave up cultivation has often drawn rents downwards. Most prominently, however, pressure on land was relieved by the dramatic growth of non-agricultural sectors: from 1988 onwards, the total labour force engaged in agriculture in the Central region declined sharply, losing 1 million workers out of a total of 3.5 million in the ensuing decade. This was also reflected in an appreciation of real rural wages.

We now turn to the examination of the impact of legal interventions enacted by the state during the twentieth century to regulate the land market and tenancy. The first items of legislation (the 1892 Land Law, the 1905 Land Taxation, the Consolidated Land Act of 1908, etc.) were intended to strengthen the security, transferability and taxation of land rather than to address tenancy, which was limited at the time. The Civil and Commercial Code of 1929 was apparently the first legal act to state that rentals must have written contracts, and that a three-year term had to be met by an official registration. The 1936 Land Law mostly dealt with the prime concern of ownership and it was only with the promulgation of the Act Controlling the Hire of Paddy Land (1950), prompted by petitions of farmers from Nakhon Pathom and Samut Sakorn (who had lost their land to a prominent landlord of this region) and followed four years later by the Land Code,

that issues of tenancy came to the fore. The 1950 Act prescribed 'fair' rent ceilings as being unrealistically low, and stipulated that the minimum lease period should be five years, that a reduction of rents should occur in the case of crop failure, and that rents would not be due before harvest.⁶⁵

Between March and November 1974, Bangkok witnessed demonstrations by farmers that were fuelled by demands concerning indebtedness, land loss and low prices for rice. The majority of the demonstrators actually came from the North and the 'upper Central Plains' (Phichit, Kamphaengphet, Phitsanulok, Petchabun, Nakhon Sawan), where landlord/tenant conflicts appear to have been the most significant. Those coming from the delta were generally farmers from Ayutthaya, Ang Thong and Singburi provinces, regions that not coincidentally form the flood-prone area. The movement centred on seven demands, including the establishment of a minimum price of paddy at 3,000 *baht*/tonne, the limitation of ownership to 50 *rai* (100 in the Northeast), the enforcement of the 1950 Act, and several measures concerning farmers who had lost their land through indebtedness.⁶⁶

Another Act Controlling the Hire of Paddy Land was enacted in 1974; it appeared as a mere revamping of the 1950 Act, imposing some rules, most specifically on the maximum amount of rent charged (10 *thang*, or close to one-third of the total harvest) and the minimum length of contracts (increased to six years). Admittedly the law was only weakly enforced and ended up being as ineffective as the preceding Acts, while 'rents and leases continued to be regulated by custom, not by law'.⁶⁷ In 1981, the Agricultural Land Rent Act also set a minimum contract duration of six years.

A few commonalities can be observed in this chronology. First, the legislation has stubbornly failed to produce the expected results and has sometimes even been counterproductive, as Suthiporn has noted.⁶⁸ This is clear from the fact that the content of the laws was by and large identical. Secondly, the various pieces of legislation all contained loopholes that made it easy for landlords to evade the law. The most important was that the landlord's claim that he/she wanted to cultivate the land personally was enough to recover the land, which was tantamount to the eviction of tenants. The limitation on land ownership was also evaded because the Codes were referring to individual rather than family ownership and landlords could circumvent the law by distributing their holdings among their family members.⁶⁹ Regulatory intervention by

65 Verachai Tantikul, *Land Tenure in Thailand* (Berkeley: University of California School of Law, 1973). Feeny, *Political Economy*, discusses the earliest pieces of legislation; on the 1929 Code, see Masang Banterng, *Evaluation of Agrarian Reform Measures in Thailand* (Dhaka: Center on Integrated Rural Development for Asia and the Pacific, 1985).

66 Out of the thirty-five cases of murder of rural leaders inventoried by Kanoksak Kaewthep, only three involve leaders from the Central Plain (while Chiang Mai province comes first with an appalling total of fifteen cases); Kanoksak Kaewthep, 'Les transformations structurelles et les conflits de classes dans la société rurale thaïlandaise d'après l'étude d'un cas: la Fédération de la Paysannerie Thaïlandaise (1973-1976)' (Ph.D. diss., CUSRI, Chulalongkorn University, 1986). On the 1974 protests, see also Akira Suehiro, 'Land Reform in Thailand: The Concept and Background of the Agricultural Land Reform Act of 1975', *Developing Economies*, 20 (1982): 314-47; and J. Ansil Ramsay, 'The Limits of Land Reform in Thailand', *The Journal of Developing Areas*, 16, 2 (1982): 173-95.

67 Sein Lin and Bruce Esposito, 'Agrarian Reform in Thailand: Problems and Prospects', *Pacific Affairs*, 49 (Fall 1976): 436; Suthiporn Chirapanda, *The Thai Land Reform* (Bangkok: Agricultural Land Reform Office, 1998), pp. 5, 50.

68 *Ibid.*, p. 5.

69 See the discussion in Suehiro, 'Land Reform'.

the state is often a difficult process and rarely meets with success. In many instances, it can even be said that laws have had an adverse impact on tenants by making landlords adopt protective attitudes, not the least being the ending of contracts that could have threatened their interests.

Regulatory attempts, worked out in times of crisis, are generally based on the 'valid assumption that tenants in general are the weaker party, that they are apt to succumb to pressures of powerful land owning interests'. These attempts 'to break the landlord-tenant nexus and thus facilitate implementation of the rent regulations and other tenancy provisions', although intended to control imbalances of power, ignored the risk-sharing aspect of sharecropping. More generally, they overestimated the power of the state to enforce regulations at the village level and alter a particular aspect of a complex and interdependent set of both social and production relationships.⁷⁰

Conclusion

Conventional wisdom conveys an overall vision of the Chao Phraya Delta as a region epitomising the deleterious effects of the penetration of capitalism into peasant economies. Emphasis is often placed on the darker aspects of its history, in particular the conflicts that marred the reclamation of the Rangsit area, the precariousness of tenancy in the East Bank until World War Two, or the agrarian crisis of the late 1960s and early 1970s. Such episodes certainly indicate the extent of the peasants' struggle in ensuring subsistence during the twentieth century. If a longer temporal perspective is adopted, however, it appears that the specific issue of landowner-tenant relationships demands a more qualified approach.

Reviews of historical data on land rental arrangements show that they were first characterised by a very high spatial and temporal heterogeneity and therefore resist simple interpretation. Rent types and values embody differences in risk, ecological conditions and the degree of social proximity between contractors. They adapt rather flexibly to changes in water control, land use, rice prices and differentials between land demand and supply. Sharecropping has now almost become a thing of the past and rents are expressed either in fixed cash amounts or in fixed quantities of rice (also paid in money equivalent). Real rents increased after World War Two until the early 1970s and have declined significantly since then.

From a brief historical account of the changing terms of trade between landowners and tenants, we have derived a perspective that is more balanced than the impression conveyed by the periods of crisis alone. In particular, it appears that the coercive or bargaining power of the landed/capitalist class as a whole was significantly restricted by the land frontier, which provided an ultimate solution to extreme and desperate indebtedness and exploitation, and by landowners' inability to cultivate their land by themselves, partly due to their lack of control over labour – even wage labour – as absentee owners with no interest in or familiarity with agriculture. The rural proletariat was never poor enough or sizable enough to be forced into labour, nor were the social power and political backing of the landlords of any coercive nature, as was the case in some colonial countries.

70 A.N. Seth, 'Problems of Implementation of Tenancy Reform', paper presented at the National Seminar on Land Problems and Policies in Thailand, 9-13 February 1970.

With the closure of the land frontier, however, the power of local capitalists temporarily grew through their control on land registration and moneylending, and real rents increased, culminating in the crisis of the 1960s and early 1970s. Legal and political interventions aimed at enforcing regulations also proved largely ineffective in rebalancing abuses, as in the case of similar 'abortive legislative schemes' attempted in Burma or in Malaysia.⁷¹ With the provision of institutional credit and the consequent decline of moneylending, local landlords turned to investments in the developing non-agricultural sectors and often moved out of the villages. The land rental market appears here as one of the elements of the agrarian system and its evolution reflects the wider transformation of the latter. The relative easing of the pressure on land during the last twenty-five years is but one aspect of the stabilisation of the agricultural population in the delta, combined with processes of intensification, agricultural diversification and the development of off-farm activities.⁷²

Despite the counter-example of the landlord area prior to World War Two and cases of contracts with local capitalists in the 1960s and early 1970s, it would be misleading to take the perceived precariousness of verbal or year-to-year contracts as a hallmark of the delta. Contracts with Bangkok-based absentee landlords appear to be the cheapest ones; they are stable and are generally passed on to the next generation. Those among relatives (accounting for at least half of all land rental) are based on trust and no formalisation is felt to be necessary. On the whole, contracts cannot be understood fully as a purely economic transaction, and they still benefit from some degree of social control. Their flexibility also fits the tenant's concern to avoid being trapped in a long-term commitment in case of a slump in rice prices. All of this points to a relatively balanced relationship, except for a few historical periods when more lopsided terms of trade emerged, only to be rebalanced by a new crisis.

71 Elson, *End of the Peasantry*, pp. 148-57.

72 Kasetsart University and IRD (ex-ORSTOM), *Identification of Agricultural and Irrigation Patterns in the Central Plain of Thailand: Prospects for Agricultural Research and Development* (Bangkok: DORAS Project, 1996).

**Table 1. HISTORICAL VARIATION OF THE DISTRIBUTION OF RENT TYPES
(IN PERCENTAGE OF FARMS RENTING LAND)**

Location	Year	Cash	Kind ^a	Crop share
Rangsit	1880-1920	Predominant		
Central Plain	1930	77 ^b		23
Ang Thong	1930	Before crisis		Increase after crisis
6 Central provinces ^c	1950	38	62 ^c	
Bang Chan (Minburi)	1948-52	8	91	1
Central Plain	1953	25 (+ 16% free)	63 ^c	
Bangkhuad (near Bangkok)	1954	70	30	0
Banoi, Ayutthaya	1963		Predominant	
6 Central provinces	1963	52	48 ^c	
5 Central provinces	1964	41	52	7
11 Central provinces	1965	23	63	14
Central Plain	1968	32	68 ^c	
Ayutthaya, floating rice	1970	6	38	56
Ang Thong	1972	17	71	8
Central Plain	early 70s		66	
Tha Rua, Ayutthaya ^d	1973	25	30 ^e	45
Ang Thong	1974	4	82	4
Singburi (deep water)	1974	87	13	0
Central Region, 490 tenants	1975	33	67 ^s	
Mae Klong	1976	24	47	29
Bang Len	1976	43	53	4
6 Central provinces	1978	74 (fixed)	26	
Manorom, Chai Nat	1979	47	31	22
Phophya, Suphanburi	1985	21 (+ 9% free)	63	7
6 Central provinces	1993	95 (fixed)	5	
Tha Wung, Lopburi	1998	83 (+ 11% free)	0	6
Tha Rua, Ayutthaya	2000	33 (+ 9% free)	58	0
Suphanburi	2000	19 (+ 22% free)	59	0

a Rents 'in kind' correspond to rents fixed in *thang/rai* that were initially paid in paddy and then, during the last three decades, gradually converted to cash-equivalent based on the market price.

b Most of the cases of sharecropping are in Chanthaburi and Phetchaburi provinces. In Thanyaburi (Rangsit), all 42 cases are in 'cash rent.'

c Including 8 per cent of mixed cash/kind, split between the two categories.

d The sample contains both transplanted and broadcast rice.

e In kind or crop share

f This percentage is higher for full tenants (average 1973 and 1974).

g It is not clear whether or not rents 'in paddy rice' include some rents in crop-sharing.

Sources: Data for this table are drawn from sources already cited in the footnotes, as well as the following: Supachit Manopimoke, 'Choice of Rice Production Technique in Thailand, 1880-1940' (Ph.D. diss., University of Hawaii, 1989); National Statistics Office, *Agricultural Census of Thailand: 1963/Sammanno kankaset Pho. So. 2506* (Bangkok: National Statistics Office, 1965); Ministry of Agriculture, *Raingan phon kansamruat phawa setthakit khong thi theukhrong tham kankaset Pho. So. 2496/Thailand Economic Farm Survey 1953* (Bangkok: Ministry of Agriculture, 1955); Wiwatchai Attakor, 'Land Rent Problems of the Thai Tenant Farmers', *Warasan phathana borihansat/Thai Journal of Development Administration*, 15 (1975): 649-94; and S. Jewsaward *et al.*, 'A Study on Rent and Rental Conditions in Selected Land Reform Areas' [translation of unknown Thai title] (Bangkok: Agricultural Land Reform Office, 1982), cited in Suthiporn, 'Land Tenure Systems'.

Table 2. EXAMPLES OF LANDLORD PROFILES IN THREE DIFFERENT ENVIRONMENTS IN THE DELTA

Province	Landlord's Residence		Bangkok	Family Ties		Landlord's Occupation		
	Village/ local	Province		Relative	Non- relative	Farmer	Ex- farmer	Non- farmer
Suphanburi	79	13	8	67	33	17	63	21
Lopburi	68	18	15	69	31	34	31	34
Ayutthaya	33	41	26	51	49	3	51	46

Source: Molle *et al.*, *Impact of the Access*.

Table 3. COMPARISON OF RICE PROFITABILITY OVER TIME, FOR RENTS IN KIND (TRANSPLANTED RICE)

Year	Yield (<i>thang/rai</i>)	Rent (<i>thang/rai</i>)	Other costs (<i>thang/rai</i>)	Income ^a (<i>thang/rai</i>)	Rent (per cent of income)	Rent (per cent of harvest)
East Bank						
1954	30	8 [6-10]	8	23	36	27
1965	30	8 [7-9]	12	18	44	27
1975-80	50	9 [8-10]	16	34	26	18
1995	65	8 [6-10]	24	41	20	12
Upper delta, transplanted						
1950	30	7	7	23	30	23
1965	35	11	8	28	40	31
1971	40	12	13	27	44	30
1978	50	15	16	34	44	30
1988	60	15	24	36	41	25
1995	75	15	28	47	32	20
1998	75	15	25	50	30	20

Sources: see Table 4.

^a Income calculations do not include opportunity costs of land and family labour, and are given before deduction of the rent (in order to calculate the rent as a percentage of this income).

Table 4. CASH RENTS, EXPRESSED IN THANG OF PADDY (ONE THANG-10KG)

Year	Yield (<i>baht/rai</i>)	Paddy price (<i>baht/tonne</i>)	Rent (<i>thang/rai</i>)	Average yield (<i>thang/rai</i>)	Rents (per cent of harvest)	Rents (per cent of harvest)	Net income (per cent of gross income)
East Bank, broadcast rice							
1902	4	60	7	30	22	26	85
1910	5 ^a	50	10	30	33	44	75
1919	4.3 ^a	60	7	30	24	32	75
1929	4 ^a	50	8	30	27	34	78
1931	2.5 ^a	20	13	30	42	108	39
Upper delta, transplanted rice (traditional varieties, then HYV, later with wet broadcasting)							
1929 ^b	8 [6-12]	70 [60-80]	11	25	46	76	60
1934 ^b	3 [2-6]	25 [20-30]	12	25	48	109	44
1948	30	800	4	20	13	16	80
1954	60	800	8	30	25	33	75
1970	130	1000	13	40	33	48	68
1976	220	2000	11	50	22	32	68
1988	450	3800	12	70	17	26	66
1995	500	4500	11	75	15	24	63
1998	500	6000	8	75	11	17	67

1 includes land tax.

2 Adapted from Prince Burachat, 'Socio-Economic Income' for broadcast rice in Ang Thong province.

The income calculation does not consider opportunity costs of family labour and land. Land preparation is assumed to be carried out by the farmer. Land rents are not included. Rent values are estimated based on the data presented in the tables. Rice prices are taken as the average value of the three or four years around the indicated year.

Sources: Data for the East Bank are adapted from Johnston, 'Rural Society'; Prince Burachat, 'Socio-Economic Income'; Ingram, *Economic Change*; and Subvattana, 'Kanphalit lae kankha'. The range of rice prices after the crisis are taken from general statistics.

Data for the upper delta are adapted or averaged from: Kamol, 'Study of a Rice Growing Village'; Kaufman, *Bangkhuad*; J. Sriswasdilek, 'Don Chedi, Suphan Buri, Thailand', in *Changes in Rice Farming in Selected Areas of Asia* (Los Banos, Philippines: International Rice Research Institute, 1975), pp. 243-63; Somporn Isvilanonda, 'Phalittaphap khong saphayakon lae tonthun kanphalit khao phan mai lae khao phan pheunmuang, Amphoe Don Chedi Changwat Suphanburi' (Masters Thesis, Kasetsart University, 1972); Somporn Isvilanonda, 'Effects of Pregerminated Direct Seeding Technique on Factor Use and the Economic Performance of Rice Farming: A Case Study in an Irrigated Area of Suphan Buri', in *Thai Rice Farming in Transition*, ed. Akimi Fujimoto *et al.* (Tokyo: World Planning, 1990), pp. 293-304; ILACO, *Chao Phraya Irrigated Agriculture*; Fujimoto and Matsuda, *Study of Rice Productivity*; François Molle and Jesda Keawkulaya, 'Water Management and Agricultural Change: A Case Study in the Upper Chao Phraya Delta', *Southeast Asian Studies/Tonan Ajia Kenkyu*, 36, 1 (1998): 32-58; Rangsan Pitipunya, 'The Economics of Rice Farming and Crop Diversification in the Central Plain, Thailand' (Ph.D. diss., Tokyo University of Agriculture, 1995); and François Molle and Thippawal Srijantr, unpublished data.

Table 5. EVOLUTION OF RENTS (1900-2000)

Year	Rent in kind (<i>thang/rai</i>)	Equivalent (<i>baht/rai</i>)	Rent in cash (<i>baht/rai</i>)	Share-cropping	Location	Source
Late 1800s	10, landlord areas				Lower delta, East Bank	1
1902			4 (1 first year, 2 second year)		Rangsit	2
1902			1 to 10 (according to land quality)	Rangsit	3	
1905			2		–Bangkhuaad (near Bangkok)	4
			4		–Ratburi	
1907			1-4		–Thanyaburi (Rangsit)	5
			2.5-4		–Nakhon Chaisi	
1909			1.5 (low grade)		–Khlong Prawet	5
			1 (low grade)		–Ayutthaya/Ratchaburi	
1916				40% /12-16%	Good land/bad land	4
1922			2		Khlong Saen Saeb	5
bef. crisis			4		Rangsit	6
1930			12 / 8 / 6 for 3 grades of land		Ang Thong	7
1932			6 / 3 / 2.5 for 3 grades (post-crisis)		Ang Thong	7
1948	5-8		30		Bang Chan	1,8
1952	6-10		50			
1952	10-20			1/3 to 1/2	Lopburi, Ang Thong	9
1953	12.6 [10-15]		53 [35-77]	1/4 to 1/2	Central Plain	10
1954	8		60		Bangkhuaad, Minburi	11
1962				1/4 to 1/2	Manorom Project	12
1963	10				Ang Thong	13
1964		55	54		5 Central provinces	14
1950-65	10 or more; 6-7 until 1950		100 or more		Singburi	15
1965	9		75	1/3 to 1/2	11 Central provinces	16
1967	9		97		Central Plain	17
1967				2/5	Ratchaburi	18
1967			20-100	1/5 to 1/3	Upper Central Plain	19
1968	5-10		100	1/4 to 1/3	–Lower delta	9
	20	200		1/2	–Floating rice area	
	10-12	100-120			–Upper delta	
1969	12-20		200	1/2, adjustable	Ayutthaya, transplanting floating rice	20
1970	14				Suphanburi (floating rice area)	21
1971	10		88		11 central provinces	22
1971	15		130		Ban Mae, Lopburi	23
1972	13-15		200		Ang Thong	13
1970-4	8-20		80-250		Central Plain	22
1973			110		Central region	24
1973	10-17		132		Tha Rua, Ayutthaya	25
1974			50 and 100		West Bank (Ayutthaya)	26
1974	10		150-250, less for relatives		Singburi, deep water	15
1975			Recently increased from 120 to 200	25-40%	Upper delta	27

1975	7.2 [0-15]		89 <i>baht</i> [0-250]	Central region, 490 tenants	28
1976			250 (30-35% of income)		29
1977	8-10	200	200-300	Pak Kret	30
1978	12.1 [10-17]		100 [only field crops]	Suphanburi, 408 tenants	31
1978			178 [only field crops]	Suphanburi	32
1978	8.4 [6-10]		50%	Ratchaburi, 800 tenants	33
1979	9			-Bang Len	34
	17			-Sri Prachan	34
1979	10	300	131 33-40%	Manorom	35
1980			230	Mae Klong	36
1983	10 (28% of production)		201 (19% of production)	Central Plain	37
1985	19	480	509	Suphanburi	38
1985	12-15	310-390		Mae Klong	39
1986			448 (per crop)	Central Plain	40
1988			500	Saphaya, Chai Nat	41
1991	9-10 ^a	370		Chachoengsao	42
1991		182	560	Suphanburi	43
1993			390-455	Suphanburi	44
1996-8			400-600	Central delta	45
1998	10-15		312 [200-500]	Central delta	46
				(trad. varieties)	
1998			415 [300-500]	Lopburi, Tha Wung	47
				(mostly trad. varieties)	
1999	8			Chachoengsao, B.Nam Priaw	45
1999	15		280	Sri Prachan, Suphan	48
1999	9 [5-10]		254	Don Phut, Saraburi	48

(Numbered sources refer to the list following this table).

a The report mentions a rent of 9-10 kg of rice/*rai*; this was assumed to be an error for 9-10 *thang/rai*.

- 1 Hanks, *Rice and Man*
- 2 Johnston, 'Rural Society'
- 3 Van der Heide, *General Report*
- 4 Feeny, *Political Economy*
- 5 Subvattana, 'Kanphalit lae kankha'
- 6 Zimmerman, *Siam: Rural Economic Survey*
- 7 Prince Burachat, 'Socio-Economic Impact'
- 8 Kamol, 'Study of a Rice Growing Village'
- 9 Tomosugi, 'Land System'
- 10 Ministry of Agriculture, *Raingan phon kansamruat*
- 11 Kaufman, *Bangkhuad*
- 12 Praiwan Resanond, 'A Survey of the Economic Condition of Farmers within the area of Manorom Irrigation Project' (Bangkok: Kasetsart University, 1962)
- 13 Gisselquist, 'History of Contractual Relations'
- 14 Chaiyong *et al.*, *5 changwat*
- 15 Tanabe, 'Rice Growing Technology'
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- 18 Terwiel, 'Development by Fits and Starts'
- 19 Kemp, *Hua Kok*
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- 21 Tongruay Chungtes and William Burton, *Costs of Producing High Yield Varieties and Traditional Rice Varieties in Suphan Buri Wet Season 1970, and Dry Season 1971* (Bangkok: Kasetsart University, 1972)
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- 30 Thiravet Pramuanratkarn, 'Impact of Urbanization on a Peripheral Area of Bangkok' (Ph.D. diss., University of Washington, 1979)
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- 32 Department of Land Development, *Report of the Land Tenure Survey, Phanom Tuam*
- 33 Department of Land Development, *Report of the Land Tenure Survey, Nakhon Chum*
- 34 Praipol and Boonchuai, *Land Tenure*
- 35 Suthiporn, 'Land Tenure Systems'
- 36 ILACO and Empire M & T, *Greater Mae Klong Malaiman Irrigation Project Feasibility Study* (Bangkok: ILACO, 1980)
- 37 Masang, *Evaluation of Agrarian Reform Measures*
- 38 Fujimoto and Matsuda, *Study of Rice Productivity*
- 39 ILACO, Empire M & T, *Mae Klong Irrigation Project, Right Bank; Project Monitoring and On-going Evaluation* (Bangkok: ILACO, 1985)
- 40 Somporn Isvilanonda and Saran Wattanuchariya, *Differential Impact of Modern Rice Technology Across Production Environments: A Case Study of Thai Rice Villages* (Bangkok: Kasetsart University, 1990)
- 41 Michael Montesano, 'Local Knowledge of Another Sort: Relationships among Land Transfer, Mortgage, and Rental in Three Sub-districts of Sukhotai, Phrae and Chai Nat Provinces' (Masters thesis, Cornell University, 1992)
- 42 Chantana Banpasirichote, 'Community Integration into Regional Industrial Development: Case Study of Klong Ban Pho, Chachoengsao', paper presented at Year-End Conference on 'Who Gets What and How? Challenges for the Future', Thailand Development Research Institute, Bangkok, 1993
- 43 Pascale Phelinas, 'Rice Entrepreneurs Facing Land Constraints', in *Entrepreneurship and Socio-Economic Transformation in Thailand and Southeast Asia*, ed. Amara Pongsapich *et al.* (Bangkok: Chulalongkorn University, 1995), pp. 63-75
- 44 Rangsan, 'Economics of Rice Farming'
- 45 Author's unpublished data
- 46 Molle and Thippawan, *Agrarian Change*
- 47 Lionel Latham, 'Diagnostic agraire d'une petite région agricole de la plaine centrale de Thaïlande' (Mémoire de fin d'études, Institut d'Etude du Développement Economique et Social (Paris), 1998)
- 48 Molle *et al.*, *Impact of the Access*

