

Rural Institutions and Their Influence upon Agricultural Development in Modern China and Taiwan*

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One of the most intractable problems of economic development is to determine how and to what extent rural institutions influence agricultural development. Scholars generally agree that these institutions exert some influence on the way households use their resources to farm. But is this influence at all important in determining whether agricultural development is accelerated or retarded? This is an issue worth investigation.

Some institutions are said to discourage the improvement of land and the increase of productivity. Land tenure in modern China is one such example. Most landlords only leased land for short periods. They made little provision to supply tenants with capital and credit. It is claimed that the rents absorbed so much of the harvest that tenants were left with too small a surplus to live comfortably and manage their farms profitably. Yet closer inspection shows that farm production might not have been as efficient as it was without this land tenure system. Leasing and renting land equalized the use of land and labor already distributed very unequally between village households. Land tenure also caused labor migrating from sorely afflicted regions to reclaim waste lands. In spite of these advantages, many still believed that the system was too defective to justify its existence. Such a criticism ignored the interdependency between land tenure and other rural institutions. Shattering this interdependency could so modify conditions as to lead to very undesirable consequences for villages. This point will be discussed later.

It has also been asserted that an institution which formerly served a useful purpose might no longer do so when conditions rapidly changed. Most rural institutions slowly evolved in the past when the economy lacked complexity, and individuals devised the means they thought best to accommodate themselves to existing circumstances. These

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institutions fulfilled a number of functions commensurate with the social values and attitudes of the age. Later on, after unexpected, external forces impinged upon the economy producing new reactions, these institutions appeared as anachronisms even retarding rural development. Consider for a moment the land inheritance practice of equally dividing land between the male heirs.

At the end of the nineteenth century, roughly eight or nine out of every ten households resided in the countryside. Population had steadily increased, and available farm land was gradually being exhausted in many regions. As foreign trade developed, railways linked port cities with the interior, and urban centers increased their demand for food and fiber; new requirements were imposed on the rural economy. Household heads continued to divide their land between their sons as in the past. The average farm dwindled in size and became more fragmented. This system created diseconomies of scale for household farms and made it more costly to manage the land efficiently. This was the process so described in China after 1900, but how much importance can be assigned to this institution's influence upon rural development is an exceedingly knotty question to answer.

The comparative method of analysis makes it possible to examine this issue. This method is only as suitable as the conditions being compared. In some situations, an appropriate comparison to isolate relevant causal factors is impossible because similarities for the same time sequence do not exist. This is not true for modern China because Taiwan can be used as a normative case to determine if rural institutions were responsible for the slow growth of farm production in mainland China.

Taiwan came under Japanese influence and control in 1895. Before that time its rural institutions and local administration had scarcely been modified by the frontier conditions existing on the island. Its rural institutions, similar to those of the mainland, remained relatively unchanged and intact until Chinese authority was restored over the island in 1945. Farm output in Taiwan increased more rapidly between 1900 and 1937 than on the mainland, and the factors causing farm output to rise in Taiwan can be identified with a fair degree of accuracy. These new elements are not observed to have operated in mainland China. If two regions with similar rural institutions experienced different growth performances, and several new elements accounted for a more rapid growth of farm output in one region but not the other, we can only conclude that rural institutions were not of sufficient strength to prevent an agricultural transformation if these new elements were introduced. This argument does not refute the assertion that rural institutions may have inhibited certain changes which upon gathering strength over time could later initiate an agricultural transformation. The argument merely claims that as long as new elements were introduced, these rural institutions were not of sufficient and necessary importance to block agricultural improvement.

In part one I will discuss land inheritance, rural credit and land tenure in both regions. This will be followed by a brief description of changes in agricultural production in both regions. The essay concludes with an evaluation of how rural institutions related to agricultural development in both regions.

Rural Institutions

Chinese society was not rigidly hierarchical. Social classes were naturally defined, and obligations and privileges for each class were clear to all. Individuals held high expectations of moving to positions of greater wealth and higher status within their class and occupation or to enter another class to achieve the same. Some social classes were naturally at a disadvantage. Peasants found it extremely difficult to move into the secure and remunerative occupations of urban society because these demanded special skills, knowledge and capital not easily acquired and accumulated by living in the village. Within the village, however, households had the opportunity to acquire land, achieve a position of wealth, and win the veneration and respect of other villagers. Some households were more successful and fortunate to do this than others. The rural institutions each household depended upon made it possible for peasants to acquire land and derive a livelihood from agriculture.

Land Inheritance

Dividing property equally between sons made it possible for each generation of farmers to earn a living from the land, particularly when employment was scarce elsewhere in the economy. Chinese peasants preferred to transfer their wealth to their sons rather than keep it intact under the control of a single son bearing the family name.¹ Interesting as it is to speculate on why *fen-chia* was practiced throughout China for over two thousand years, our concern here is with the custom itself and its consequences for farm management.

Peasant children were married at an early age: sons between 17 and 20 and daughters between 15 and 18 years of age.² Early marriage enlarged the household which now entered a rather critical period in its life cycle. If the new living arrangements did not

¹ The precise reason for this has never been made clear. A number of social and legal historians have pointed out the significance of Chinese family heads dividing property equally between sons, but no one has attempted to relate the effects of this custom on farm management. Probably this value trait was so deeply imbedded into culture that it precluded any consideration of the possible advantages of primogeniture. For a discussion of the stress placed on the equal property sharing between sons see Niida Noboru, *Chūgoku no ho to shakai to rekishi* (Chinese Law, Society and History), Tokyo, Iwanami Shoten, 1967, pp. 159-162. Niida himself is not clear why this custom originated so early in Chinese history and persisted down until the present with such vigor. However, Niida regards it to be of paramount importance for influencing peasant living standards, their management of land, and landlordism.

² Chiao Chi-ming, *Chung-kuo nung-ts'un she-hui ching-chi hsüeh* (Social and Economic Theory of the Chinese Village), Chungking, Commercial Press, 1945, pp. 71-72. Professor Chiao presents evidence showing that most young men were married around 20 and girls at 17 years of age. The marriage age was slightly higher in north China than the south.

produce difficult adjustments and the household head maintained his authority without opposition from his sons, household property remained intact for some time. If disagreements became violent, pressures mounted to force an early division of land and wealth. Quarrels between brothers and their wives invariably involved the household head, and if such matters were not brought under control, there was no other course for him but to divide the household wealth between the sons.

Fen-chia was a momentous event for the peasant family. It meant the end of a household if the household head died or discord could not be settled by discussion and compromise. Whatever reason prompted *fen-chia*, a list or *fen-tan* itemizing all wealth was compiled. Arrangements were made for the care of the elder parents by setting aside a few plots of land for their support if land was available. Upon their death, this land was sold to finance funeral expenses, and any remaining land was then divided equally as all property had been before. *Fen-chia* was practiced throughout China and Taiwan.³ We have several examples of how *fen-chia* was conducted from a 1939 village survey of Chia-ting hsien in Kiangsu by a team of Japanese researchers stationed in Shanghai.⁴

Chia-ting hsien was a rice, wheat and cotton producing area that exported its products to the Shanghai market. Most villages engaged in handicraft cloth production, and roughly one-third of village income was derived from the sale of cotton and cotton products. This survey found that repeated division of the land over time had reduced the average size of farms because of the steady increase in rural population. Farms were smaller than a half century ago, and more households were despatching labor to work in the market towns or Shanghai. The household head held claim to the land, paid the land tax, and only his decision permitted *fen-chia* to be undertaken. The eldest son had no prior claim to the land or any hope of acquiring full rights over it. Only in the event of the household head's death when the other sons were not yet of age to farm, did the eldest son assume full right to the land.

Farms were divided according to the following examples.⁵ On one farm of 35 mow, the household head divided 27 mow equally between his three sons and retained 8 mow for him and his wife to live on. Of this 8 mow, 2 were given to the eldest son for assisting the parents. *Fen-chia* was modified if the farm had become too small. One

³ For a lively discussion of the practice of *fen-chia* since T'ang and Sung times and its possible effect of causing large, wealthy rural families to become smaller in size and fewer in number with each passing century see Shimizu Morimitsu, "Shina kazoku no shokōzō" (Various Structures of the Chinese Family) *Mantetsu Chōsa Geppō* 20:9 (September 1940), pp. 32-33. For a discussion of *fen-chia* in Taiwan see Takeuchi Taigi, *Taiwan kanshū* (Taiwan Customs), Taipei, Taiwan Nichinichi Shimpōsha, 1915, volume 2, pp. 301-302; see also Hsiao-Tung Fei, *Peasant Life in China*, London, George Routledge & Sons, Ltd., 1939, pp. 63-69.

⁴ Mantetsu Shanhai Jimmusho Chōsashi, *Shanghai tokubetsushi Kateiku ichi chōsa hōkokusho* (An Investigation Report of Conditions in a Village of the District of Chia-ting, a Special Municipality of Shanghai), Shanghai, 1939.

⁵ *Ibid.*, pp. 130-140.

farm contained a family of five which included an aged father and mother, 68 and 70 years old respectively. The household head had owned 12 mow thirty years before, but he had pledged the land to borrow money. When he failed to repay the interest on the loan, he mortgaged his land. He was unable to repay the loan and redeem his land, and so he became a tenant renting 5 mow. When household division occurred, the eldest son was given the 5 mow to farm, but an arrangement was reached whereby the youngest son agreed to go to Shanghai to work. The eldest son supported the aged parents who continued to live with his wife and child.

Tenant land was divided between the sons if there was enough for them to farm. In another example, a household head with wife and three sons had formerly owned land. In 1919, they had borrowed funds to take up commerce but had gone bankrupt. The land was mortgaged, and after failing to redeem it, the household rented their land as a tenant household. After the household head's death, the 22 mow of tenant land was divided into 6.5 mow shares between the three sons. As the youngest son was still too small to farm his share, it was given to his mother who also had 2.5 mow for her support. This latter share was later split equally between the three sons when she died.

Fen-chia for a large, wealthy farming household meant that after accumulating land for one or two generations, several medium-sized farms were suddenly created. Because plots were invariably scattered, some of these households rented or leased land depending upon their location, and the motivation of the peasant concerned. One or more of these new farmsteads might again begin to accumulate land, and perhaps later, achieve the prosperity held by the parent household. Other farmsteads might retain their position, while still others sank into obscurity. Villages were characterized by clusters of household farms periodically fragmenting into smaller farming units, increasing their holdings, only to *fen-chia* again to form yet another cluster of small household farms.

Several village studies show this kind of change. In 1938 Japanese field researchers examined the records of a large family farm in north Manchuria's Sui-hua hsien. This farm of 1,000 *shang* had been divided between eleven sons in 1930.⁶ By 1937 eleven farming households had already sold 45 *shang* so that 5 per cent of the inherited land had already been lost. Five family farms leased land to other farms, and five more rented land from their neighbors. Another study of a lineage group in Hsü-shui hsien of Hopei in 1940 showed land exchange and change in size of holdings from the time the lineage founder had accumulated holdings of 210 mow in 1882. This household divided its land

⁶ A *shang* is the Manchurian land measure equivalent to roughly seven mow, but this unit was never properly standardized until after 1931. It was originally defined as the amount of land a peasant and a horse could plough in a day. The *shang* varied in size according to locality from five to ten mow. For the way in which a large farm was divided between eleven sons in Manchuria see Iwase Suteichi, "Hoku-Man ni okeru daikazoku bunke no ichi jirei" (An Example of Equal Division of Property in a Large Family Farm of North Manchuria) *Mantetsu Chōsa Geppō* 20:12 (December 1940), pp. 66-95.

TABLE 1

THE INFLUENCE OF *FEN-CHIA* ON LAND DISTRIBUTION AND FARM SIZE
IN MI-CH'ANG VILLAGE OF FENG-JUN COUNTY, HOPEI (1937)

1. Number of Farms Ranked by Farm Size for Specific Time Periods^a

Size Class of Farm (mow)	Number of Farms			
	1937	1927-33	1910-15	1895-1905
100 - 200	3	1	6	3
50 - 99	9	6	13	6
25 - 49	7	6	8	5
0 - 24	57	48	45	38
Total	76	61	72	52

2. Percentage of Farms Ranked by Farm Size for Specific Time Periods

Size Class of Farm (mow)	Percentage			
	1937	1927-33	1910-15	1895-1905
100 - 200	3.9	1.6	8.3	5.8
50 - 99	11.8	9.8	18.1	11.5
25 - 49	9.2	9.8	17.8	9.6
0 - 24	75.1	78.8	55.8	73.1
Total	100.0	100.0	100.0	100.0

3. Percent of Farm Land Ranked by Farm Size for Specific Time Periods

Size Class of Farm (mow)	Percentage			
	1937	1927-33	1910-15	1895-1905
100 - 200	23.8	11.5	37.8	32.4
50 - 99	32.8	34.9	36.5	33.7
25 - 49	14.0	24.6	11.4	13.8
0 - 24	29.4	29.0	14.3	20.1
Total	100.0	100.0	100.0	100.0

4. Average Size of Farm Ranked by Farm Size for Specific Time Periods

Size Class of Farm (mow)	Average Size Farm (mow)			
	1937	1927-33	1910-15	1895-1905
100 - 200	132.0	120.2	142.5	145.0
50 - 99	60.9	60.7	63.6	75.3
25 - 49	33.7	42.9	42.2	37.0
0 - 24	8.6	6.3	7.3	7.1
Average	21.8	17.1	31.4	25.9

a. These time periods are estimated and the error may be from between three to five years difference from the ranges I give.

SOURCE: Minami Manshū tetsudō kabushiki kaisha, *Kitō nōson jūtai chōsa hōkokusho* (A Survey Report of Village Conditions in Northeast Hopei), Dairen, 1937, pp. 5-10.

equally between three sons who in turn divided the land amongst their progeny. By 1940, several generations later, there were fifteen family farms with a total of 374 mow of land.⁷ Sixty years before there had been one large farm totalling 210 mow, but in 1940 only two households owned more than 50 mow while the remaining thirteen households farmed between 10 and 30 mow.

In 1937 another Japanese team investigated a village in northeastern Hopei and obtained enough evidence to compile a table showing *fen-chia* taking place over half a century (see Table 1). Some of the data are suspect because they were obtained from interviews where household heads were asked the amount of land their parents and grandparents had owned. Human memory is subject to great error; nevertheless, such information should not remain unused without some critical evaluation. Data in Table 1 only encompass households possessing land.⁸ The number of landowning households increased by 46 per cent between 1900 and 1927. Village land increased from 1,341 to 1,662 mow, but there seems to have been a large increase in village land between 1910-15 to a high of 2,264, followed by decline because of sales to outsiders. It is very possible the 1910-15 data are incorrect, but even excluding this period, *fen-chia* reduced the average size of farm for all but the class of farms with 0-25 mow. The percentage of farms in the largest size category also declined over the period. However, medium size category farms remained constant while the percentage share for the smallest farm size category increased.

It is easy to see why field investigators in the 1930's were alarmed by the extent of unequal land distribution. In Mi-ch'ang village as of 1937, roughly 4 per cent of village households owned nearly one-fourth of the land, while nearly three-fifths of the households owned less than 30 per cent of the land. Yet such inequality had always existed: in 1895-1905 nearly 6 per cent owned one-fifth of the land. In spite of the large inequality of land distribution in the 1930's, land was distributed more unequally in the late nineteenth century. If Mi-ch'ang village represents a typical tendency throughout China, increasing inequality of land distribution simply did not take place. In all likelihood, the retention of greater population within the village economy would have produced the tendency of growing land distribution inequality had not *fen-chia* periodically dismembered the larger farms.

⁷ Kumashirō Yukio, "Kahoku ni okeru nōka no bunke to tochi no ugoku" (Peasant Household Division of Land and Land Transfer in North China) *Nōken Hōkoku Chōhen*, Peking, 1943, pp. 167-266. This study was one of two dozen field reports undertaken by the Agricultural Economics Department of Peking University on various aspects of the rural economy such as *fen-chia*.

⁸ A similar table could be constructed for Ta pei kuan village of P'ing-ku hsien in northeast Hopei to show the same constancy of land distribution and the gradual decline of average farm size for each size class of farms. For reference to such evidence see Minami Manshū tetsudō kabushiki kaisha, *Kitō nōson jittai chōsa hōkokusho: dai san han, Ho jun ken* (A Survey Report of Village Conditions in Northeast Hopei: Documentary Volume III, Feng-jun county), Dairen, 1936, pp. 6-9. See also the same sort of data for households practicing *fen-chia* in Manshū tekikoku daidō gakuin, *Manshū nōson ni tsuite* (Conditions of Manchurian Villages: A Village of Central Manchuria), Shinkyō, 1937, charts 1 & 2 opposite page 72.

Many observers of the Chinese rural economy have complained about the time and labour spent by a farm family shifting between a dozen or more small, scattered plots. These remarks imply that had households consolidated their land, ploughed more systematically and mobilized labor on larger holdings, labor efficiency would have been higher and land productivity increased. In actual fact, the additional efficiency acquired from consolidating a few plots was probably very little and scarcely affected crop yields. This problem deserves study, but *prima facie* evidence suggests it was often easier to farm and irrigate only a few, select plots because of limited water and fertilizer. The peasant did not need labor saving tools to produce a larger harvest. What produced a large harvest was the peasant's ability to plant the proper seeds and care for his crops; saving labor did not produce higher yields on small plots. If sufficient labor could have been saved by consolidating plots and employing it elsewhere to earn additional income, the household would naturally have benefitted. This argument has nothing to do with raising land productivity, which is a matter of using improved seed varieties and complementary inputs.

Rural Credit

In times of distress, households borrowed from the wealthy of the market towns by pledging their land as security or mortgaging their land to redeem it a few years later. A poor harvest was the primary reason why claims to land shifted from villages to the market towns and tenancy increased in certain farming areas. Land was an indispensable asset used by peasants as collateral for obtaining credit from holders of loanable funds.

When a household found a lender, it designated "a certain plot of land for transfer to the lender as his right to use if the original loan was not repaid."⁹ Sometimes a building or even the entire farmstead was pledged as security on the loan. Lender and debtor drew up a deed designating the immovable asset to be pledged, its value, the loan period, and the interest to be paid. The period for loan repayment was usually a year. This method was common throughout Manchuria, north China and other parts of China. Surveys undertaken in Taiwan between 1899 and 1902 found the same system in use. In Taiwan the amount of loan was usually around 30 per cent of the asset being offered as security and a monthly interest of 2 or 3 per cent was then paid to the lender.¹⁰

⁹ Minami Manshū tetsudō kabushiki kaisha 南滿洲鐵道株式會社 (South Manchurian Railway Co.) *Manshū kyūkan chōsa hōkoku — o no kanshū* 滿洲舊慣調查報告—押の慣習 (Report of the Survey of old Customs in Manchuria: The Custom of Pledging Land as Security), Hsinking 新京, 1935, p. 1.

¹⁰ Rinji Taiwan tochi chōsakyoku (Provisional Committee for Investigating Land in Taiwan), *Taiwan tochi kankō ichi han* (Documents Concerning Taiwan's Land Customs), Taipei, Taiwan Nichinichi Shimposha, 1905, pp. 136-140.

The second informal method for obtaining credit involved borrowing larger sums and was called *tien* or *tien-tang*. The borrower transferred a portion of his land to the lender until he could repay the loan. The lender freely used the land as he wished, often leasing it, and the borrower did not pay any interest. The loan on pledged land ran as high as 70 per cent of the land's value. The customary period of loan repayment was usually two to three years, often longer, depending upon the area of the country.¹¹ Lender and borrower drew up a deed stating the amount of land and its value, the period of *tien*, and time and form of repayment. Both affixed their signatures to the document, and a go-between serving as middleman then signed his name. When the loan was repaid, the land reverted to the original owner. Examples have been found where a peasant repayed a debt contracted by his father, and then he demanded and obtained the return of land which his parents had mortgaged.

Both of these methods for obtaining credit were used widely in east central China. A survey by Han Te-chang of several villages in western Chekiang in 1928 found that land was used in the same two ways to obtain loans but called by different names.¹² In early 1937 one Japanese researcher reported the following on the village credit system in Wu hsien of Kiangsu.¹³

Pledging land as security and mortgaging land were the two methods of providing credit. *Ti-t'ien* was the system used to obtain a loan by pledging land as security and *tien-t'ien* was the system used to obtain a loan by mortgaging land. Both methods of obtaining loans were similar, but their legal definition differed. *Ti-t'ien* meant pledging one's land as security and receiving money from the person who accepted the pledged land; afterward, the party pledging the land continued to manage the land. During the period of pledge, the borrower pays interest to the lender. Taxes must be paid to the government on this pledged land by the party pledging the land. In the case of *tang-t'ien* or *tien-t'ien*, the party mortgaging the land receives a loan from the lender and transfers the land to the lender during the period of loan. The lender uses the land according to his wishes or he may lease it to another person to farm. The profit from using the land accrues to the lender in lieu of interest payment on the loan. Furthermore, the lender bears all expenses for using the land and pays taxes on it.

In Taiwan land was used both as security and to be mortgaged for a loan. The format of the *tien* documents resembled those found on the mainland.¹⁴

In this peasant economy land represented a source of wealth and acquired some of the characteristics normally attached to money. Households eagerly sought to acquire

¹¹ Minami Manshū tetsudō kabushiki kaisha (comp.), *Manshū kyūkan chōsa hōkokū—ten no kanshū* (Report of the Survey of Old Customs in Manchuria: The Custom of Mortgage), Shinkyō, Daido Inshokan, 1935, p. 14.

¹² Han Te-chang, "Che-hsi nung-ts'un chih chieh-tai chih-tu" (The Credit System in Villages of Western Chekiang) *She-hui k'o-hsüeh tsa-chih* 3:2 (June 1932), pp. 139-185.

¹³ Hayashi Megumi, *Chū-Shi Kōnan noson shakai seido kenkyū* (A Study of the Village Social System of Central China's Kiangnan Area), Tokyo, Yuhikaku, 1943, pp. 217-218.

¹⁴ I have compared land documents pertaining to securing credit and sale of land from materials collected by the Japanese in their Taiwan land surveys between 1898 and 1902 with those for Manchuria and north China. The procedures for setting forth the deeds, use of a middleman-guarantor or *pao-chung jen*, and format of the deeds are quite similar.

land for the income it yielded when farmed, and because it represented security in difficult times. As family farms increased their size, land was increasingly used to borrow credit for farming, and more importantly, to shift from agriculture to commerce. Because few lending institutions existed in market towns, legal protection involving disputes over property transactions was non-existent, and there was no formal land market. Therefore, mortgaging land and using it as security was widely practiced. This enabled scarce credit of the market towns to be allocated to villages. Households preferred to lease land for short periods in the event it became necessary to use this land for obtaining credit. This was one very important reason why the period of rent lease for land was so very short. If households leasing land entered into long term leases, they would be unable to use their land to obtain credit. The land tenure and rural credit system were interrelated, and each had to be maintained in its customary form in order to perform satisfactorily.

Land Tenure

During the 1930's, land tenure became the object of special concern and was viewed as the major cause of agrarian backwardness and peasant distress. The first rural investigations had shown villages to be densely populated, most households farming less than 10 or 15 mow, and many households only renting land. It was not until the national land commission published its survey findings in late 1937, confirming the 1930-33 survey findings of J. L. Buck, that sufficient evidence was convincingly presented to show that owner-cultivators still dominated throughout the country. Some provinces had a higher percentage of tenants and part-owners than others, but for the country as a whole owners, part-owners and tenants constituted 44, 23 and 33 per cent respectively.¹⁵ The majority of tenants did not consist of households without any land but of part-owners renting land.

Land tenure arrangements were used to reclaim and settle new land and to equalize the unequal distribution of land and labor in villages. The spread of land tenure was greatly determined by the existing rural credit system.

When land was reclaimed in Manchuria during the late nineteenth and early twentieth centuries, in central China after the devastation of the Taiping armies, and in Taiwan during the eighteenth century, land tenure arrangements were used to finance the clearing of land and the initial years of farming. Individuals with wealth, pluck and foresight, who had staked prior claims to unsettled tracts, claimed the sub-surface right of the land or *t'ien-ti*, registered their land with local officials, and paid the land tax. Migrants moving onto this land were at first financially assisted by these land-owners. In the initial stages the countryside abounded with tenant households. As farmsteads

¹⁵ John L. Buck, *Land Utilization in China*, Chicago, University of Chicago Press, 1937, p. 195.

gradually reclaimed land of their own or purchased land from large landowners, they became owner-cultivators or part-owners. Some households even transferred their tenant rights to other households in order to farm newly reclaimed land.¹⁶ From the rents they charged, they realized some gain and paid their stipulated rent. Regions such as Manchuria consisted of zones where, as the eye moves northward, the percentage of tenant households rose from small, moderate, to very large.¹⁷ The same pattern prevailed in Taiwan. Tainan was one of the first areas to be settled in the early eighteenth century. As agriculture and commerce developed, households gradually moved from tenant to part-owner status. By the mid-eighteenth century migrants were already moving into central Taiwan as tenant farmers. By the early twentieth century this rich farmland area contained the highest percentage of tenant households throughout the island.¹⁸

Households with labor, farming skill and luck enlarged their holdings. They accumulated land up to the point where the household labor force and the labor that could be hired from other farms no longer farmed all plots efficiently. In every village there

¹⁶ D. L. Lieu, "Land Tenure Systems in China" *Chinese Economic Journal* 2:6 (June 1928), pp. 460-461; "Tenancy and Land Ownership in Chekiang" *The Chinese Economic Monthly* (October 1926), p. 432; Tōa Kenkyūjo, *Shina nōson kankō chōsa hōkokusho—Hoku-Shi ni okeru kosaku no horitsu kankei* (An Investigation Report of Old Customs in China: Legal Relationships of Tenants in North China), Tokyo, Tōa Kenkyūjo, 1944, pp. 8-9 and p. 39; Imabori Seiji, "Shindai ni okeru kosaku seido ni tsuite" (The Tenant System during the Ch'ing Period), *Tōyō Bunka*, 42 (March 1967), pp. 82-83. On this point Imabori claims that "Actual use of the land was gradually transferred to other households. Although the original landowners did not know to whom their land had been leased, local officials still pressed them to pay their taxes. Furthermore, because the landowner did not know which tenant was really renting the land he could not collect his rents. Therefore he was unable to pay his taxes."

¹⁷ Japanese land surveys in Manchuria showed the following zones of owner-cultivated and tenant-farmed land:

Region	Per Cent of Land		Total
	Owner-cultivator	Tenant	
1. North Manchuria ^a	50.7	49.3	100
2. Central Manchuria ^b	31.1	68.9	100
3. South Manchuria ^c	71.3	28.7	100
Average	51.03	48.97	

a. Based on a survey of 17 villages

b. Based on a survey of 10 villages

c. Based on a survey of 10 villages

Source: Hsinkyō jimmukyoku, *Manshū nōgyō yōran* (A Survey of Manchurian Agriculture), Hsinkyō, 1940, pp. 307-308.

¹⁸ A Japanese land tenure survey in 1921-23 found that of a total number of 423,278 households 42 per cent were pure tenant households, 21 per cent were part-owners, and 37 per cent were owner-landlord households. The percentage of tenant households was highest in Taichung (70 per cent), followed by Hsinchu (53 per cent), Taipei (47 per cent), and then Tainan and Kaohsiung districts in the south with the lowest percentage of tenant households. See Taiwan sōtokufu shokusan kyoku, *Kakushū kosaku kankō chōsa* (A Survey of Tenant Customs in Each Prefecture of Formosa), Taipei, Seishin Shōkō Insatsubu, 1926, pp. 23-24. Villages in the Kiangnan region were settled gradually by families who could trace their ancestors from pre-Taiping times and by farm families which had migrated there from remote areas after the rebellion. See Hayashi Megumi's comments on the original settlers of Sun chia liang village which he investigated periodically between 1939 and 1942. *Hayashi Megumi*, pp. 80-81.

existed many households which upon *fen-chia* or arrival in the village had more labor than could be used on their land even during the slack farming seasons. These households rented extra plots from the farms with extra land to lease. In this way labor and land were combined more efficiently.

The striking feature about rent contracts was their impermanency. Land leasing households could withdraw from a contract after only a year. Most contracts were by oral agreement, but in more developed rural areas contracts were drawn up in rent books. Absentee landlords often employed superintendents to manage rent collection.¹⁹ In east central China landlord bursaries or *tsu-chan* managed the holdings of absentee landlords and collected their rents, paid taxes, and collected rent arrears.²⁰ In northern Anhwei where clan power was still strong, small parcels were leased to tenants on a fairly long term basis. In spite of the widespread variation of lease throughout the country, short term lease seemed to have predominated.

Short term lease ensured a household of easy withdrawal from a rent agreement without damaging its good relationship with that household. Maintaining good will was important and served as the basis for reciprocity between households who rendered assistance or favors to one another.²¹ A household losing this good will endangered its future if on later occasions it needed assistance. Long term lease with tenant households was typically contracted by absentee landlords who did not use the rural credit system and therefore did not need to use their land to borrow funds. Short term leasing characterized landlord-tenant relationships between households of the same village or between villages.

Finally, tenancy quite often arose out of the rural credit system. If a village had experienced a spate of poor harvests, many households borrowed from the more wealthy within the village or the market towns. Land was pledged and mortgaged. Some households later repaid their loans and redeemed their land, but those unable to do so were permitted to farm their land as tenants. In this way many tenant households emerged in villages where previously little tenancy had existed. This explains to a great extent the odd variation of high tenancy in districts with low population density and little specialization in cash crops where one would normally have expected tenancy to be low. In Lao wa chuang village of T'ai-an hsien in Shantung, village rented land was merely

¹⁹ Even in east central China where absentee landlords were most numerous, there seems to have been little standardization of rent contracts and periods of lease between countries. See the results of the land tenure survey of Kiangsu, *Hsing-cheng yuan nung-ts'un fu-hsing wei yuan hui ts'ung-shu, Kiang-su sheng nung-ts'un tiao-ch'a* (A Survey of Villages in Kiangsu Province), Shanghai, Commercial Press, 1934, p. 56.

²⁰ Yüji Muramatsu, "A Documentary Study of Chinese Landlordism in Late Ch'ing and Early Republican Kiangnan" *Bulletin of the School of Oriental and African Studies* 29:3 (1966), pp. 568-585.

²¹ Morton Fried, *Fabric of Chinese Society: A Study of the Social Life of a Chinese County Seat*, New York, Praeger, 1953, pp. 99-135.

18 per cent of total farm land,²² yet in Kao chia lu village of Wei hsien only a short distance away village rented land was 65 per cent of total farm land.²³ In Kiangsu province similar variations existed. In Yen chia shang village of Ch'ang-shu hsien roughly 80 per cent of village land was tenant land, but in T'ou tsung ch'ao village in Nan-t'ung county only 32 per cent of village land was tenant land.²⁴ Village conditions were strikingly similar, and the large difference in tenancy seems to be explained by greater borrowing by Yen chia shang villagers sometime in the past.

The three rural institutions discussed above must be viewed as an integral part of the village economy performing useful services to households. To criticize each independent of the other will cause misunderstanding of the roles they performed. These institutions enabled peasants to reclaim land without government support, provided peasants with employment opportunities in agriculture, and allocated land, labor and credit to households having few of these resources. It is difficult to argue convincingly that the elimination or modification of one or more of these institutions would have enabled this rural economy to develop and perform as well as it did without considering the necessary substitutes that would have otherwise had to be introduced.

Agricultural Development in Taiwan and China

Since 1900 Taiwan has demonstrated an extraordinary capacity to develop its rural economy in spite of rapid population growth, and in recent years, the maintenance of a huge military burden. Agriculture has increased its production of tropical products, and farmers have shifted away from the main staples of sugar and rice to fruits and vegetables. In the last quarter century the average farm size fell below one hectare, yet land productivity has continued to rise. Recent studies of farm production trends since 1900 confirm that output increased steadily until the mid-1920's and then gradually accelerated.²⁵ The change in growth rate of farm output for various studies can be seen in Table 2.

²² Mantetsu chōsabu 滿鐵調查部 *Hokushi nōson gaikyo chōsa hōkoku: Taian ken; dai ichi ku; Kaseigōkyō rōaisō* 北支農村概況調查報告—泰安縣第一區下西隅鄉澇窪 * 莊— (An Investigation Report of Village Conditions in North China: T'ai-an hsien; First district; Hsia hsi yu hsiang; Lao Wa Chuang). These conclusions are based upon calculations from this study's statistical appendix. This study was part of a series of special county and village surveys undertaken by the Mantetsu Chōsabu in Hopei and Shantung in the late 1930's.

* [Am uncertain if original character is correct; maybe it should be 窪 instead of 窪]
I refer to it as ↑

²³ Mantetsu chōsabu 滿鐵調查部 *Hokushi nōson gaikyo chōsa hōkoku: I ken; dai ichi ku; Kokarosen* 北支農村概況調查報告—濰縣第一區高家樓村 (An Investigation Report of Village Conditions in North China: Wei county, First district; Kao chia lu Village), Dairen, 1940. The Village of Kao chia lu, located near the county seat of Wei County, had increased its area by only 85 mow while the number of households had nearly doubled.

²⁴ Mantetsu Shanhai jimmusho chōsashi, *Kōsasho Jōjūkaiken nōson jittai chōsa hōkokusho* (An Investigation Report of Rural Conditions of Ch'ang-shu County in Kiangsu Province), Shanghai, 1939. Calculated from Table 1 of statistical appendix; see all the T'ai-ts'ang Survey by the same team, statistical appendix.

²⁵ Ramon H. Myers and Adrienne Ching, "Agricultural Development in Taiwan under Japanese Rule" *The Journal of Asian Studies* 23:4 (August 1964), p. 556.

TABLE 2

AVERAGE ANNUAL GROWTH RATE OF AGRICULTURAL OUTPUT FOR DIFFERENT PERIODS OF DEVELOPMENT IN TAIWAN (1910-1960)

Different Measurements of the Average Annual Rate of Agricultural Output (per cent)

Period (Year)	Hsieh and Lee ^a	Myers and Ching ^b	Ho ^c
1910-20	1.66	1.96	1.23
1920-39	4.19	4.48	4.42
1939-45	-12.32	-14.72	-15.71
1945-52	12.93	n.a.	13.52
1952-60	3.98	n.a.	4.30

SOURCE: a. S. C. Hsieh and Y. H. Lee, *Agricultural Development and Its Contribution to Economic Growth in Taiwan—Input-Output and Productivity Analysis of Taiwan Agricultural Development*, Taipei, Joint Commission on Rural Reconstruction, 1966, p. 14.

b. Ramon H. Myers and Adrienne Ching, "Agricultural Development in Taiwan under Japanese Rule" *The Journal of Asian Studies* 23:4 (August 1964), p. 556.

c. Yhi-min Ho, *Agricultural Development of Taiwan 1903-1960*, Tennessee, Vanderbilt University Press, 1966, pp. 17-18.

n.a. = not available

The island's rice and sugar exports continued to increase until the very late 1930's while population grew rapidly. Yet living standards did not fall but even improved slightly. War interrupted these trends, but by 1953 output was again expanding and continues until the present. There has not been any change in the composition of food imports to suggest that domestic food supply has not kept pace with demand. In the last decade the movement of rural people to the cities has been very great, and now the farm population as a share of total population gradually declines. Agricultural growth has contributed impressively toward the structural transformation of Taiwan's industry and population.²⁶

Between 1900 and 1927 mainland China's political system became increasingly unstable as warlordism, revolution and civil war paralyzed various sections of the country. After 1929, the country was partially unified and experienced a shortlived period of stability until war broke out with Japan in 1937. The economy was then plunged into inflation and decline. Crop statistics are poor and incomplete for this period, but in spite of these difficulties, several significant features of development can still be detected.

²⁶ See Ramon H. Myers, "The Agricultural Development of Taiwan: 1895 to 1965" to appear in Rick Shand (ed.), *Case Studies of Agricultural Development in Asia*, Canberra, Australian National University Press, 1969 (to be published in August, 1969).

Rural population steadily increased, and there is every indication that urban population grew at an even more rapid rate.²⁷ Exports also rose, and most of these commodities consisted of processed raw materials produced in villages.²⁸ Although food imports began to rise after 1914, this upward trend was erratic, and during the early 1930's it showed definite signs of declining.²⁹ Farm production had to increase to support a larger non-farming population and the export growth which took place, and it is quite

²⁷ H. O. Kung, "The Growth of Population of Six Chinese Cities" *China Economic Journal and Bulletin* 20:3 (March 1937), pp. 301-314.

²⁸ Ho Ping-yin, "Agriculture in China's Foreign Trade" *China Economic Journal and Bulletin* 19:6 (December 1936), p. 637. In 1934 and 1935 roughly one-half of China's exports consisted of main food grains.

²⁹ Inspector General of Customs, *Report on the Trade of China, 1930-1940*, Shanghai, 1934 onwards. The trend of net imports of rice, wheat, and flour into China from 1913 to 1940 can be seen as follows:

Net Imports of Rice, Wheat and Flour into China from 1913 to 1940 (Piculs)

Year	Value of Rice, Wheat and Flour Imports (Chinese \$)	Index (average 1936/37=100)
1913	7,899,054	109
1914	8,872,846	122
1915	8,456,140	117
1916	11,261,510	155
1917	9,799,269	135
1918	6,950,926	96
1919	582,213	8
1920	851,685	12
1921	10,599,846	146
1922	22,127,589	305
1923	29,937,063	413
1924	24,964,263	344
1925	15,694,822	216
1926	27,021,746	373
1927	25,906,868	357
1928	18,527,457	256
1929	16,486,651	227
1930	25,554,949	352
1931	33,514,234	462
1932	44,208,020	610
1933	42,371,316	584
1934	21,415,899	295
1935	30,884,758	426
1936	7,573,461	104
1937	6,928,690	96
1938	10,924,745	151
1939	18,919,936	261
1940	18,492,571	255

Data for years 1913 to 1930 obtained from Ou Pao-san, *Chung-kuo liang-shih tui-wai mao-i; ch'i ti-wei ch'u-shih chi pien-ch'ien chih yuan-yin* (China's Foreign Grain Trade: Its Role in Foreign Trade, General Trends and the Reasons for Trade Changes), Shanghai, 1933, see statistical appendix. Data after 1930 were obtained from Customs Reports of the 1930's.

probable that the annual growth rate was in the magnitude of 1-1.5 per cent per annum.³⁰ Even allowing for error which might have elevated this growth rate to 2 per cent, farm output does not seem to have increased at the rate it did in Taiwan.

What were the elements that accounted for Taiwan's agricultural transformation but not that of mainland China? The Japanese administration in Taiwan promoted agricultural development by establishing research stations in various districts to study local conditions and the opportunities for improving seeds, fertilizers, pest control, crop storage, soil management, and livestock care.³¹ They attached to these research stations an agricultural extension service system consisting of rural associations made up of landlords and wealthy farmers. These associations received new seed varieties from the research stations and tested them in their gardens, obtained advice on better farming methods, and transmitted these results to nearby villages. Local police and village leaders made certain these new seeds were widely used and modern farming practices were adopted. This system was in full operation by 1910, but it was not until the late 1920's that the cumulative results of experimentation produced a rice seed hybrid that revolutionized rice production.

The second element was overhead investment to develop transportation, marketing, sanitation and irrigation. By 1925 the area of irrigated land had doubled, and after 1925 irrigation projects were constructed on a larger scale. The major railways, harbors and roads were constructed before 1910 and improved upon in later years.³² Public health measures, first introduced into cities and then the countryside, eliminated several major diseases and brought others under strict control.³³ The net effect of expanding the rural infrastructure was to double the area of land cultivation between 1901 and 1925, strengthen and improve the quality of the farming population, and enable farmers to produce more efficiently for the market.

A careful examination of agrarian history in mainland China forces one to conclude that local government was unable to support a network of research organizations and a farm extension service on the scale comparable to that in Taiwan. Several stations were established in Shantung and Kiangsu, and the research completed in such units showed a great growth potential for agriculture if only improved seed varieties could have been

³⁰ See Ramon H. Myers, *The Chinese Peasant Economy: A Case Study of Agricultural Development of Shantung and Hopei: 1890-1949*, Cambridge, Harvard University Press, to be published in 1970; see chapters of section 3.

³¹ *Op. cit.*, Myers and Ching, pp. 559-564.

³² Chang Han-yu and Ramon H. Myers, "Japanese Colonial Development Policy in Taiwan: 1895-1906: A Case of Bureaucratic Entrepreneurship" *The Journal of Asian Studies* 22:4 (August 1963), pp. 433-449.

³³ George W. Barclay, *Colonial Development and Population in Taiwan*, Princeton, Princeton University Press, 1954, pp. 136-139.

introduced, the supply of fertilizers increased, and pest controls intensified.³⁴ Local government expenditures for flood control, roads and education were gradually being increased during the early 1930's until war cut off their flow. Yet these efforts left the rural infrastructure unchanged during this period, and the farming community was compelled as always to depend on its own resources to market crops, recover from natural disasters, and improve traditional farming technology.

The Chinese peasant was at the mercy of warring armies that devastated his village, pillaged his crops, and absconded with his livestock, carts and labor. Pests, floods and droughts combined to reduce his harvest every three or four years. Yet he carried on with the institutions his forefathers had modified to farm his land under the most adverse circumstances. The government provided neither stability nor protection for the peasants, and the new elements responsible for Taiwan's agricultural growth were completely absent in China.

In both China and Taiwan the traditional institutions of land tenure, rural credit and land inheritance remained unchanged until 1949 or 1950. Only one minor exception needs to be mentioned on this point. In Taiwan the traditional absentee landlords, called *ta-tsu*, lost their claim to the land after the land survey was completed in 1902.³⁵ Administrative decree merely speeded up a process which had been well underway for the past half century. The *hsiao-tsu* or tenants living in the countryside and paying rent to the *ta-tsu* had already reclaimed land of their own and had begun to rent to other households. With the loss of *ta-tsu* rights, the *hsiao-tsu* became the new landlord class in the village. Therefore, tenancy was already widespread at this early date, and the characteristics of this land tenure system, like that on the mainland, persisted until land reform was introduced in 1949. Aside from the elimination of the *ta-tsu*, Taiwan's rural institutions were not altered in any way to permit greater investment in agriculture and the introduction of new farming technology. These two new elements made a successful impact on agriculture because peace and stability were maintained throughout the period. Had these new elements been introduced in mainland China, agricultural development would undoubtedly have been accelerated. The necessary side conditions for their introduction, however, were never created.

Conclusion

Many scholars have cited traditional rural institutions as barriers to economic progress.

³⁴ For evidence of the possible yield and output increase that would have taken place from introducing new seeds, better fertilizers and pest control see T. H. Shen, *Agricultural Resources of China*, New York, Cornell University Press, 1951, part 11. For example, rice production could have been increased by 30 per cent, wheat by 23 per cent, cotton by 26 per cent and rape by 28 per cent with application of chemical fertilizers. See p. 38.

³⁵ Ōkurashō, *Meiji saisho zaisei shi* (History of Fiscal Policy during Meiji and Taisho), Vol. 19, Tokyo, 1940, pp. 209-229.

They have further argued that these institutions, land tenure in particular, required drastic reform if the living standards of the peasantry were to be improved. From Taiwan's experience in agricultural development it is not at all apparent that these institutions interacted to cause low productivity and poverty. In fact, they helped peasants to take advantage of their limited resources to farm as efficiently as traditional techniques permitted.

A comparison of Taiwan with mainland China shows that in Taiwan a local administration dedicated to developing agriculture by introducing a system of research and farm extension and investing heavily to develop the rural infrastructure could assist farmers enormously to raise land productivity. Yet peasants continued to farm and live within the framework of traditional rural institutions. The inability of local government in mainland China to provide stability and introduce these same new elements explains why farm production did not rise more rapidly than it did.

Our comparative study shows that rural institutions were not sufficient and necessary conditions that obstructed Chinese farmers in increasing farm production. These institutions definitely played an important function in enabling peasants to farm their land. They do not seem to have impeded the adoption of new farming techniques or neutralized the beneficial effects of an improved rural infrastructure on village economy. Contemporary research on the Asian village economy must pay more attention to how new technology is introduced and diffused throughout the countryside and what is the role of rural institutions in this process.

List of Japanese Works cited in Essay

1. Hayashi Megumi 林惠海, *Chū-shi Kōnan nōson shakai seido kenkyū* 中支江南農村社會制度研究 (A Study of the Village Social System of Central China's Kiangnan Area), Tokyo, 1943.
2. *Hsinkyō jimmukyoku* 新京事務局 *Manshū nōgyō yōran* 滿洲農業要覽 (A Survey of Manchurian Agriculture), Shinkyō, 1940.
3. Iwase Suteichi 岩佐捨一, "Hoku-Man ni okeru daikazoku bunke no ichi jirei" 北滿における大家族分家の一事例 (An Example of Equal Division of Property in a Large Family Farm of North Manchuria) *Mantetsu Chōsa Geppō* 滿鐵調查月報 20:12 (December 1940).
4. Kumashirō Yukio 熊代幸雄, "Kahoku ni okeru nōka no bunke to tochi no ugoki" 華北における農家の分家と土地の動き (Peasant Household Division of Land and Land Transfer in North China) *Nōken Hōkoku Chōhen* 農研報告長編, Peking, 1943, pp. 167-266.
5. Imabori Seiji 今堀誠二, "Shindai ni okeru kosaku seido ni tsuite" 清代における小作制度 (The Tenant System During the Ch'ing Period) *Tōyō Bunka* 東洋文化 42 (March 1967).
6. *Manshū tekikoku daido gakuin* 滿洲帝國大同學院, *Manshū nōson no jittai—chūbu Manshū no ichi noson ni tsuite* 滿洲農村の實態—中支滿洲の一農村について (The Actual Conditions of Manchurian Villages: A Village in Central Manchuria), Shinkyō, 1937.
7. *Mantetsu chōsabu* 滿鐵調查部, *Hoku-shi nōson gaikyō chōsa hōkoku: Shin Ken dai ichi ku Kokarōson* 北支農村概況調查報告: 濰縣第一區高家樓村 (An Investigation Report of Village Conditions in North China: Kao chia lu village in section one of Wei County), Dairen, 1940.
8. *Mantetsu chōsabu* 滿鐵調查部, *Hoku-shi nōson gaikyō chōsa hōkoku: Taian ken dai ichi ku Kaseigōkyō rōaisō* 北支農村概況調查報告: 泰安縣第一區下西嶗鄉滂窪莊 (An Investigation Report of Village Conditions in North China: Lao wa village of Hsia lu yu district of section one, T'ai-an county), Dairen, 1940.

9. Mantetsu Shanhai jimmusho chōsa shitsu 滿鐵上海事務所調查室 Kōsōsho Jōjukuken nōson jittai chōsa hōkokusho 江蘇省常熟縣農村實態調查報告書 (An Investigation Report of Actual Rural Conditions of Ch'ang-shu County in Kiangsu Province), Shanghai, 1939.
10. Mantetsu Shanhai jimmusho chōsashi 滿鐵上海事務所調查室 Shanhai tokubetsushi Kateiku ichi nōson jittai chōsa hōkokusho 上海特別市嘉定區一農村實態調查報告書 (An Investigation Report of Conditions in a Village of Chia-ting, A Special Municipality of Shanghai), Shanghai, 1939.
11. Minami Manshū tetsudō kabushiki kaisha 南滿洲鐵道株式會社 Manshū kyūkan chōsa hōkoku—o no kanshū 滿洲舊慣調查報告—押の慣習 (Report of the Survey of Old Customs in Manchuria: The Custom of Pledging Land as Security), Shinkyō, 1935.
12. Minami Manshū tetsudō kabushiki kaisha 南滿洲鐵道株式會社 Manshū kyūkan chōsa hōkoku—ten no kanshū 滿洲舊慣調查報告—典の慣習 (Report of the Survey of Old Customs in Manchuria: The Custom of Mortgage), Shinkyō, 1935.
13. Minami Manshū tetsudō kabushiki kaisha 南滿洲鐵道株式會社 Kitō nōson jittai chōsa hōkokusho: dai san han, Hojun ken 冀東農村實態調查報告書，第三班，豐潤縣 (A Survey Report of Village Conditions in Northeast Hopei: Documentary Volume III, Feng-jun county), Dairen, 1936.
14. Niida Noboru 仁井田陞, Chūgoku no ho to shakai no rekishi 中國の法と社會と歴史 (Chinese Law, Society and History), Tokyo, 1967.
15. Ōkurashō 大藏省編纂, Meiji Taisho zaisei shi 明治大正財政史 (History of Fiscal Policy during Meiji and Taisho), Vol. 19, Tokyo, 1940.
16. Rinji Taiwan tochi chōsakyoku 臨時台灣土地調查局 Taiwan tochi kankō ichi han 台灣土地慣行一斑 (Documents Concerning Taiwan's Land Customs), Taipei, 1905.
17. Shimizu Morimitsu 清水盛光 "Shina kazoku no shokōzō" 支那家族の諸構造 (Various Structures of the Chinese Family) Mantetsu Chōsa Geppō, 滿鐵調查月報 20:9 (September 1940) pp. 1-53.
18. Taiwan sōtokufu shokusan kyoku 台灣總督府殖產局 Kakushū kosaku kankō chōsa 各州小作慣行調查 (A Survey of Tenant Customs in Each Prefecture of Formosa), Taipei, 1926.
19. Takeuchi Taigi 武內貞義, Taiwan kanshū 台灣慣習 (Taiwan Customs), Taipei, 1915, 2 vols.
20. Tōa Kenkyūjo 東亞研究所 Shina nōson kankō chōsa hōkokusho—Hoku-Shi ni okeru kosaku no horitsu kankei 支那農村慣行調查報告書—北支に於ける小作の法律關係 (An Investigation Report of Old Customs in China: Legal Relationships of Tenants in North China), Tokyo, 1944.

List of Chinese Works cited in Essay

1. Chiao Chi-min 喬啓明, Chung-kuo nung-ts'un she-hui ching-chi hsüeh 中國農村社會經濟學 (Social and Economic Theory of the Chinese Village), Chungking, 1945.
2. Han Te-chang 韓德章, "Che-hsi nung-ts'un chih chieh-tai chih-tu" 浙西農村之借貸制度 (The Credit System in Villages of Western Chekiang) She-hui k'o-hsueh tsa-chih 社會科學雜誌 3:2 (June 1932), pp. 139-185.
3. Hsing-cheng yuan 邢成元 nung-ts'un fu-hsing wei-yuan hui ts'ung-shu 行政院農村復興委員會叢書 Kiang-su sheng nung-ts'un tiao-ch'a 江蘇省農村調查 (A Survey of Villages in Kiangsu Province), Shanghai, 1934.
4. Ou Pao-san 巫寶三, Chung-kuo liang-shih tui-wai mao-i; ch'i ti-wei ch'u-shih chi pien-ch'an chih yuan-yin 中國糧食對外貿易其地位趨勢及變遷之原因 (China's Foreign Grain Trade: Its Role in Foreign Trade, General Trends and the Reasons for Trade Changes), Shanghai, 1933.

Glossary

Ch'ang-shu	常熟	T'ang-t'ien	當田
Chia-ting	嘉定	Ti-t'ien	抵田
Fen-chia	分家	Tien-t'ien	典田
Fen-tan	分單	T'ai-an	泰安
Feng-jun	豐潤	T'ou tsung ch'ao	頭總廟

Hsiao-tsu	小 租	Ta-tsu	大 租
Lao wa chuan	澇窪莊	T'ien-ti	田 底
Mi-ch'ang	米 廠	Tsu-chan	租 棧
Kao chia lu	高家樓	Ta pei kuan	大北官
Nan-t'ung	南 通	Wei hsien	淮 縣
P'ing-ku	平 谷	Yen chia shang	嚴家上
Shang	晌	Tien-tang	典 當
Sui-hua	綏 化	T'ai-ts'ang	太 倉
Tien	典		

近代中國與台灣的農村制度及其對於農業發展的影響

(摘要)

馬若孟

在中國經濟史的文獻中我們常常看到一個理論，那就是中國農村的土地所有權、農村信用、以及土地繼承等制度使得農民無法對他們的土地作有效經營和提高他們土地的生產力。一般認為傳統的法律與制度阻礙了大多數農民獲得必需的資源以增進農業生產力，而且好些制度都是保護有權勢和富有的階級。如果根據這些說法推論，那麼只要能夠把某些制度改革和廢除，農民就可以有效地耕種他們的土地，同時他們的真實所得也會跟着增加。

在本文中我想提供一個不同的觀點。我認為農村制度對中國近代農業的發展並無多大影響；農村進步的推動力是新的農業技術和農村基本投資的增加，而且兩者都必須來自農村經濟之外。

為了攷驗這個假定，我曾就 1900 年和 1940 年間中國大陸和台灣的土地繼承、農村信用、及土地所有權等制度作一比較。說明這些制度的材料是得自日人在台灣、東北、華北、華東等地所收集的農村調查資料。比較之後所得的結論是大陸和台灣兩個地區的農村制度非常相近。

接着我進而比較同時期兩個地區農業生產的成長，結果顯示台灣的農業發展比大陸來得迅速。在 1920 年和 1940 年間台灣的農業生產平均每年約增加 4%，但是從城市和農村的人口成長以及出口趨勢推斷，中國大陸農產增加率最多每年不過在 1.5% 和 2.0% 之間。這是由於台灣農業加速發展的基礎已經奠立，然而政府在大陸對於革新農村經濟所作的努力却為戰爭所打斷。

由於農業推廣機構的作用，新的農業技術如改良的品種和肥料等在台灣獲得大眾採用。同時，新式運輸的投資、衛生設備的改善、和灌溉系統的擴張，使農民得以將更大部分的農產投入市場，然而在中國大陸，這些技術和設施從來沒有像在台灣那樣推廣過。因此，如果兩個地區的農村制度相同，如果台灣農業因技術創新而增加，大陸因缺

乏類似的發展而落後，那麼農村制度對於農業發展的影響必然很微小。固然，兩個地區農業成長的差異可能由另一個與農村制度的機能直接關聯的因素所造成；但是農業調查資料中並沒有顯示這樣一個因素的存在，所以這個假設不大可能成立。

農村制度雖然很可能影響新的技術在台灣被採用和推廣的情況（這個問題有待進一步的研究），可是這並不是爭論的焦點。本文所作比較經濟史的嘗試，目的在於說明農村制度並沒有阻碍中國大陸農業的發展。同時，本文要充份證明，對於維持傳統農業的技術水準和經營效率，這些制度還負起了極重大的任務。中國所真正缺乏而又極為需要的是一個改進與傳播農業技術的全國性機構。此外，在政治和社會不安定的情況下，中央與地方政府都無法去作改善農村基本設施的投資。在台灣，這些新的技術與設施對於1910年以後農業的顯著進步有着莫大的貢獻。

