



Tenancy Issues in Northwest China During the Republican Era

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6.1 INTRODUCTION

Tenancy has been recognized as one of the most important relations of production in the traditional agriculture of feudal China. The system of tenancy has long been a research subject of academic circles. Taking account of tenancy disparities across regions caused by the existing regional heterogeneity of China, it is necessary to “explore historical data to restore the truth of history,” and “especially strengthen research on different regions to discover regional characteristics and lay [a] foundation for general conclusions at a national level.”¹ During the Republican era there were few studies on tenancy issues due to a lack of statistical data and documented records. Therefore, it is necessary to further explore the rel-

¹Li Jinzhen (2011).

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evant characteristics of land tenancy on the basis of historical data. This chapter, using Buck's original household data, explores the characteristics of tenancy in the economic development of Northwest China from the perspectives of the tenant's behavior and the tenancy system. In doing so we can verify, or provide supplemental conclusions on, China's Republican-era tenancy issue. This is not only an exploration in economics and history, but also an important issue when comprehending the core of the traditional economy of modern China.

In modern geographic regionalization, Northwest China is defined in two ways: in the sense of administrative division and in the sense of natural division. The former covers three provinces and two autonomous regions (namely, Shaanxi Province, Gansu Province, Tsinghai Province, the Xinjiang Uygur Autonomous Region, and the Ningsia Hui Autonomous Region). This includes the vast regions to the west of Greater Kthingan Mountains and to the north of Kunlun Mountain—Altun Mountains and Qilian Mountains. From the perspective of weather conditions, soil characteristics, crop varieties, and cultivation modes, which are closely related to crop production, homogeneity within region by natural division is likely to be quite relevant Buck (1930). In fact, Buck's regionalization for China's agriculture was consistent with the objectively different natural environments Buck (1937a, b, c).^{2,3} Except for Xinjiang Autonomous Region, Buck's Spring Wheat Area naturally and geographically coincides with Northwest China as currently defined. Based on this geographic definition, and the data available from Buck's survey, we obtained sample data for a total of 610 farm households in Northwest China, including four localities in Gansu Province (Kaolan (1), Kaolan (2),⁴ Wuwei, and Tianshui), one locality in Ningsia

²John Lossing Buck, former Director of the Department of Agricultural Economics, Nanking University, organized and completed two large-scale rural surveys during 1921–1925 and 1929–1934, and published two monographs, i.e., *Chinese Farm Economy* and *Land Utilization in China*. After several years of work, the College of Economics and Management, Nanjing Agricultural University (NJAU) successfully sorted out and restored the whole set of original data of Buck's 1929–1934 survey stored in the university and obtained detailed figures in respect of agricultural production and rural living, which covered 16,786 sample households and 168 cities and counties across 22 provinces of China.

³In *Land Utilization in China*, Buck divided China's agriculture regions into Wheat Zones and Rice Zones. The former includes the Spring Wheat Area, Winter Wheat–Millet Area, and Winter Wheat–Kaoliang Area. The latter include the Yangtze Rice–Wheat Area, Rice–Tea Area, Sichuan Rice Area, Double-Cropping Rice Area, and Southwestern Rice Area.

⁴In the second survey, Buck selected two groups of survey samples for Gaolan, identified as Gaolan (1) and Gaolan (2), respectively.

(Ningsia), and one locality in Tsinghai (Hwangyuan). These data recorded farm households' tenancy, land usage, cropping structure, tenancy system, off-farm employment, and hired labor. Although these sample counties and households may not reflect the complete picture of tenancy relationships in Northwest China, these survey data are, so far, the only available and reliable data at the household level for the Republican era.⁵ With this caveat in mind, our analyses of these 610 households in six localities can at least provide a glimpse of tenancy and land rental arrangements in modern Northwest China.

6.2 AN OVERVIEW OF TENANCY IN NORTHWEST CHINA

Tenant farming refers to those farm households that rent-in land, including landless tenants and part-owners. Landless tenants completely relied on rented-in land, whereas part-owners owned some of their landholdings. With this concept of "owned landholdings" we can measure the division of landless tenant farmer and self-owner farmer and estimate the percentage of land rented. However, this measure is not perfect and some subjectivity is required. For example, from Buck's data the No. 9 farm household in Kaolan (1) had both owned land and rented-in land, among which all the owned land (0.103 mou) was used for constructing farmhouses and tombs and the rented-in land (1.545 mou) was the sole land used for crop production. If consideration is only given to the ratio of owned land to total land, then various statistics and survey research might differ in the identification of such farm households. This chapter holds that it would be more accurate to define these farm households as landless tenant farmers as far as they were concerned with crop production. So landless tenant farmers in this chapter refer to farm households who rented in all of their land for crop production (cropland) only.⁶

As shown in Table 6.1, in the 1930s owner farm households were dominant in six localities in three provinces of Northwest China. Ownership-tenancy proportions differed. For example, according to these data there were no landless tenant farmers at all in Wuwei and Ningsia. Although the

⁵ As calculated by the authors on the basis of Buck's survey data, the per capita cropland in the southern region and the northern region of China in the 1920s and 1930s was 2.28 mou and 3.34 mou, respectively, which accords with the estimations of per capita cropland by Zhang Youyi (1991) at approximately 2.34 mou in the southern region and 3.56 mou in the northern region.

⁶ The term "land" used alone here and in what follows means all land irrespective of usage. "Cropland" specifically means that part of land used for agricultural production.

Table 6.1 Types of farm households (%)

<i>Provinces and counties</i>	<i>Percentage of types of farm households</i>		
	<i>Owner farmers</i>	<i>Part-owner farmers</i>	<i>Landless tenant farmers</i>
Kansu, Kaolan (1)	86.00	11.00	3.00
Kaolan (2)	67.00	18.00	15.00
Wuwei	96.00	4.00	0.00
Tianshui	62.00	21.00	17.00
Ningsia, Ningsia	98.00	2.00	0.00
Qinghai, Hwangyuan	67.27	22.73	10.00

Source: Adapted by the authors from Buck's second rural survey for China

county samples are limited, Buck's survey data appears to confirm the existing academic judgments and conventional wisdom on land issues of the northwest that there were fewer landlords in Northwest China than the Northern Plain or South China, that the degree of concentration of landholdings was far less than that of the national average level,⁷ and that the tenancy economy in Northwest China was, as a whole, backward.

However, the composition of tenant farmers was very complex. Research on other regions of modern China revealed that among tenant farmers there were rich farmers similar to managerial farmers in capitalist societies as well as poor farmers who could barely afford food and shelter. The traditional view of equating the welfare and living conditions of tenant farmers as being equivalent to small land-owning farmers may not be accurate. By conducting in-depth analyses on tenancy behaviors of various types of tenant farmers from a micro perspective in Northwest China during the Republican era, we provide a data-rich supplement to existing studies that should lead to more clarification and understanding.

6.3 CAUSES OF LAND RENTING AND PRODUCTION BEHAVIORS OF TENANT FARMERS IN NORTHWEST CHINA

Previous studies, e.g. Kung et al. (2012), usually attribute land rental by farm households primarily to the natural conflict between land and people.⁸ This conflict arises from a number of different sources, but primarily the

⁷ Liu Kexiang (2001).

⁸ As pointed out by Kung et al. (2012), one of the most significant causes for land tenancy behaviors in modern China was the contradiction between land and people, arising from limited cropland resources.

cause is equivalent to a Malthusian trap, in the sense that the population growth rate increases at a rate greater than that at which new land can be brought into production; that new lands are of lower quality than historically occupied lands; and that local dynasties that emerged from earlier settlement had a prior advantage on landholdings per capita over newly established or newly emigrated farming households (Fu and Turvey 2018).

When the conflict between land and people is measured by “per capita owned cropland area,” we identified two extremes of part-owner farmers in Northwest China. One extreme was in areas where cropland resources were scarce, and the per capita cropland area was far less than the regional average. The other extreme was that in areas where cropland was relatively abundant the per capita cropland area was far more than the regional average. Those farm households with per capita cropland area around the regional average value were unexceptionally self-owner farmers. For the sake of simplicity, part-owner farmers in these two circumstances are expressed as “small part-owner farmer” and “big part-owner farmer.” As shown in Table 6.2, the various regions in Northwest China differed in per capita cropland area, and although there was a small number of part-owner farmers in Ningsia, there generally existed both types of part-owner farmers in all counties to different extents. As observed from the original data, small part-owner farmers were confronted with a prominent conflict between land and people, while big part-owner farmers owned abundant land resources and some of them even rented in land while leaving part of their owned land idle.

Table 6.2 Analysis on land and people contradiction confronted by part-owner farmers in Northwest China (unit: mou)

<i>Provinces and counties</i>	<i>Per capita area of owned cropland</i>		<i>Regional per capita area of cropland</i>
	<i>Small part-owner farmers</i>	<i>Big part-owner farmers</i>	
Kansu, Kaolan (1)	0.68 (81.82%)	3.56 (18.18%)	1.58
Kaolan (2)	0.61 (88.89%)	4.27 (11.11%)	1.86
Wuwei	2.29 (75.00%)	8.78 (25.00%)	5.52
Tianshui	1.58 (85.71%)	5.37 (14.29%)	3.18
Ningsia, Ningsia	1.99 (100%)	/	4.17
Qinghai,	3.56 (84.00%)	12.48 (16.00%)	7.79
Hwangyuan			

Source: Adapted by the authors from Buck’s second rural survey for China

Note: Values in parentheses are the percentage of a particular type in relation to all part-owner farmers

6.4 “SUBSISTENCE-TYPE” TENANT FARMERS

As discussed, the conflict between land and people was most prominent for landless tenant farmers, who had to rely on renting land to generate income. Meanwhile, those small part-owner farmers with little owned land were confronted with similar sharp contradictions. It is worth noting that the culture in Northwest China was (and still is) to bury the dead on farmlands; the spiritual bond of doing so was so great that even farm households with little cropland felt obligated to follow this tradition. In extreme cases, some farm households used up to two thirds of their owned land for building tombs, thus further intensifying the shortage of cropland for cultivation.

Landless tenant farmers and small part-owner farmers constituted the group most affected by land/population pressures and trapped in persistent poverty. Their only hope of breaking out of this poverty trap was to rent-in land. Though their form of landholdings differed, these farmers were persistently poor and of the “subsistence type” of tenant farmers. As shown in Table 6.3, the cropland area per household of landless tenant farmers in all regions was low. Conditions for small part-owner farmers were a little better, but their cropland area per household was still lower than the regional average. As revealed by existing studies, rich farmers could rent-in land easier than ordinary farmers, regardless of the tenancy system development level.⁹ If wealth was indicated by owned land, it was, naturally, more difficult for landless tenant farmers and small part-owner farmers with little land resources to obtain sufficient land.

“Subsistence-type” tenant farmers had very small areas of cropland and could generally rely on family labor to perform farm work.¹⁰ They used most of the rented-in land for growing grain crops such as wheat, millet, kaoliang, and soybean to feed their own families, but many also had to rely on off-farm employment to maintain subsistence levels. As presented in Table 6.4, a significant percentage of family members were employed in off-farm labor and this was an important source of income. In particular, for landless tenant farmers, off-farm income accounted for over half of their total family income. As observed from Buck’s original survey data, off-farm employment in Northwest China included a variety of forms, such as hired long-term labor, seasonal labor, or working as a blacksmith, stonemason, peddler, weaver, or servant.

⁹ Shi Jianyun (1998).

¹⁰ As calculated according to Buck’s original household data, for small part-owner peasants and landless tenant peasants in Northwest China family accounted for nearly 100% of all laborers.

Table 6.3 Cropland area per household for “subsistence-type” tenants

<i>Provinces and counties</i>	<i>Small part-owner farmers</i>			<i>Landless tenant farmers</i>	<i>Regional average</i>
	<i>Owned area</i>	<i>Rented area</i>	<i>Total</i>		
Gansu, Kaolan (1)	4.54	3.42	7.96	3.08	11.21
Kaolan (2)	4.64	3.27	7.91	4.38	12.39
Wuwei	21.67	6.85	28.52	/	36.64
Tianshui	8.20	5.21	13.41	11.52	15.87
Ningsia, Ningsia	10.74	6.28	17.02	/	22.31
Qinghai,	20.25	22.11	42.36	39.37	68.70
Hwangyuan					

Source: Adapted the authors from Buck's second rural survey for China

Table 6.4 Distribution and income of off-farm employment of “subsistence-type” tenant farmers in Northwest China

<i>Provinces and counties</i>	<i>Small part-owner farmers</i>		<i>Landless tenant farmers</i>	
	<i>Percentage of off-farm hired labor in family members (%)</i>	<i>Percentage of off-farm income in total income (%)</i>	<i>Percentage of off-farm hired labor in family members (%)</i>	<i>Percentage of off-farm income in total income (%)</i>
Kansu,	14.28	46.52	37.23	66.50
Kaolan (1)				
Kaolan (2)	5.68	22.17	19.28	59.62
Wuwei	37.74	22.59	/	
Tianshui	19.55	52.26	22.92	52.44
Ningsia,	12.25	11.78	/	
Ningsia				
Qinghai,	8.26	19.25	15.17	45.00
Hwangyuan				

Source: Adapted the authors from Buck's second rural survey for China

Note: In order to eliminate the influence of factors such as gender and age on the actual quality of laborers, Buck converted all laborers into adult equivalent laborers in the following criteria: one man = 1 equivalent adult laborer, one woman = 0.8 equivalent adult laborer, one child = 0.5 equivalent adult laborer. Labor data here have been transformed in such a way

6.5 CROPPING STRUCTURE: “IMPROVING LIVING CONDITION-TYPE” TENANT FARMERS

Beside the great number of “subsistence-type” tenant farmers, there were also about 10% big part-owner farmers who had abundant resources of

owned land and even owned idle land. The reason for this type of tenant farmer to rent-in land is obviously unlinked with the contradiction between land and people. Based on the sorted original data of Buck's survey, the authors hold that this may be attributed to the requirements of the cropping structure, that is, special requirements of some crop varieties for particular soil quality. Specifically, some of the owned land of big part-owner farmers in Kaolan (1), Wuwei, Tianshui, and Hwangyuan, due to poor irrigation conditions, could only be used for growing coarse cereals such as millet rather than fine grain such as wheat with a better taste and higher nutritional value. In addition, due to the lower marketing rate of agricultural products in these areas, farmers rented in land in valleys or mountains with better irrigation conditions to plant wheat to supply their own families and improve their diet structure and living quality. The case for Kaolan (2) region was special, as there were many military depots set on army land, which accounted for 43.6% of total land in this region,¹¹ so there was a higher demand for opium and tobacco. A number of farmers in this region left their owned land idle, and, instead, rented in appropriate land to plant and sell opium and tobacco for cash.

These big part-owner farmers owned cropland sufficient to maintain or even exceed the demand for family subsistence. The cause of their land-renting behavior, intended either to improve the family diet structure or to obtain more cash income, was the demand for special crops. Such land renting was a kind of tenancy for improving living conditions. As shown in Table 6.5, these farmers rented in more land than the two lower categories of subsistence farmers. Here we observe the "Mathew effect" in the tenancy market of modern Northwest China, where the area of land rented in by tenant farmers increased with the area of owned land, perhaps crowding out the opportunity for tenancy by poorer, more limited-resource households.

Large part-owner farmers, with a larger area of cropland, had to rely on hired labor in varying degrees to perform over 20% of the farm work. In addition, this type of tenant relied less on off-farm employment. As shown in Table 6.6, except for Tianshui, off-farm employment of these tenant farmers was lower in terms of family members and contribution to income. In Wuwei and Hwangyuan, there were no records of off-farm employment at all.

¹¹ In modern China, most land was privately owned, except for a certain area of officially owned cropland, school-owned cropland, temple-owned cropland, clans-owned cropland, army land, and relief cropland in a few regions.

Table 6.5 Cropland area per households of “improving living conditions-type” above-subsistence tenant farmers in Northwest China (unit: mou)

<i>Provinces and counties</i>	<i>Big part-owner farmers</i>		
	<i>Owned cropland area</i>	<i>Rented in cropland area</i>	<i>Total</i>
Kansu, Kaolan (1)	17.95	11.11	29.06
Kaolan (2)	43.65	9.16	52.81
Wuwei	37.20	9.43	46.63
Tianshui	20.98	36.71	57.69
Ningsia, Ningsia	/		
Qinghai, Hwangyuan	87.02	38.38	125.40

Source: Adapted by the authors from Buck’s second rural survey for China

Table 6.6 Labor distribution and income of off-farm employment for “improving living conditions-type” tenant farmers in Northwest China

<i>Provinces and counties</i>	<i>Big part-owner farmers</i>	
	<i>Percentage of off-farm hired labor in family members (%)</i>	<i>Percentage of off-farm income in total income (%)</i>
Kansu, Kaolan (1)	1.12	3.33
Kaolan (2)	4.04	12.00
Wuwei	0	0
Tianshui	13.52	40.20
Ningsia, Ningsia	/	
Qinghai, Hwangyuan	0	0

Source: Adapted by the authors from Buck’s second rural survey for China

Note: The labor figures have been converted to adult equivalent labor

On the other hand, and as observed in Buck’s original survey data, the higher off-farm employment percentage in Tianshui might be linked with the characteristics of the local rural economy, where men were engaged in selling firewood, seasonal jobs, and handcraft work, and nearly all the women and children in weaving and spinning.

Reexamining Buck’s data, we find that the nature of tenancy in the Republican era was complex. Our examination of the data reveals that landless tenant farmers and small part-owner farmers rented in land because of the pressures between land and people. Tenancy was a necessity

if these households sought to escape the poverty trap and survive at even the most rudimentary levels of subsistence. In addition to renting land, many households relied on off-farm employment to maintain subsistence. For larger tenancy arrangements, there was a greater reliance on hiring-in labor and less need for household members to seek off-farm employment.

6.6 TENANCY SYSTEM IN NORTHWEST CHINA

Similar to that in modern North China,¹² the land tenancy system in Northwest China in the same period included share rent, cash crop rent, and cash rent.¹³ For share rent, the output of harvest was shared by landlord and tenant in a certain proportion and the rental rate was directly expressed in share proportion (%). For the latter two forms of rental arrangements, the quantity of cereal or currency to be paid as rental was determined before the land was rented out. As observed in Buck's original data, in Northwest China landlords interfered very little in a tenant's operation of land. However, some restrictions might well have been applied. For example, in reviewing the record for farm No. 99 in Kaolan (2), it was noted that "the land shall be returned to the landlord if not properly operated by the tenant."

Tenancy systems were quite different and complex. After sorting through Buck's original survey data, we found that differences existed not only in tenancy systems across different regions, but also in tenancy systems and rental rates for different types of tenant farmers. Table 6.7 presents the characteristics of tenancy systems in Northwest China. Except in Wuwei where cash crop rent was prevalent, share rent was prevalent, particularly in Kaolan (2) and Tianshui. Research has shown that in land rental markets without an insurance system, the preferred method of mitigating crop production risks was through a share rent system between landlords and tenants.¹⁴ Though the risk preference of landlords and tenants in Northwest

¹² Shi Jianyun (1997).

¹³ All these rental forms are named in Buck's *Land Utilization in China*. Share rent is the division of crops in a certain proportion such as 40% to the landlord and 60% to the tenant. Cash crop rent is the payment of a definite amount of grain by the tenant to the landlord. Cash rent is the payment of a definite amount of money by the tenant for the use of the landlord's land. Buck also mentioned in his book another rental form that did not exist in Northwest China—cropper, which is when the tenant supplies chiefly labor in return for a certain proportion of the crop; this proportion is always smaller than in the share rent system. As this chapter is based on Buck's original household data, Buck's naming method is adopted here.

¹⁴ J. G. Sutinen, (1975).

Table 6.7 Characteristics of tenancy systems in Northwest China

<i>Provinces and counties</i>	<i>Tenancy system</i>	<i>Tenancy system for different types of tenant farmers</i>			
		<i>Tenant farmers renting in land for subsistence</i>		<i>Tenant farmers renting in land to improve living conditions</i>	
		<i>Tenancy system</i>	<i>Rental rate</i>	<i>Tenancy system</i>	<i>Rental rate</i>
Kansu, Kaolan (1)	Share rent, cash rent, and cash crop rent coexisted	Share rent Cash rent	Unknown	Cash crop rent	Unknown
Kaolan (2)	Mostly share rent, some cash rent	Share rent	50%	Share rent Cash rent	40%
Wuwei	Mostly cash crop rent, some cash rent	Cash crop rent	30%	Cash crop rent Cash rent	15%
Tianshui	Mostly share rent, some cash rent	Share rent Cash rent	50%	Share rent	25%
Ningsia, Ningsia	Share rent and cash rent coexisted	Share rent Cash rent	60%	/	
Qinghai, Hwangyuan	Share rent and cash crop rent coexisted	Share rent	50%	Cash crop rent	65%

Source: Adapted by the authors from Buck's second rural survey for China

Note: Buck's original data had no record of cash rent, so data on rental rate under the arrangement of cash rent are missing in this table

China was unknown, share rent was the most common form of land leasing arrangement in that area. As can be observed in Table 6.7, share rent was dominant in Kaolan (2) and Tianshui, which had the highest number of tenant farmers and an active tenancy economy. However, cash crop rent was dominant in the Wuwei district where there were the fewest number of tenant farmers. Various forms of land leasing coexisted in other areas.

It is worth noting that the tenancy systems and rental rates differed between "subsistence-type" tenant farmers and "improving living conditions-type" tenant farmers. Next we explore the characteristics of the three types of tenancy systems and the possible causes that led to differentiation of the tenancy systems and rental rates in Northwest China.

6.6.1 *Production Responsibilities*

As shown in Table 6.7, in Kaolan (2), Tianshui, and Wuwei there was one tenancy system that was basically the same for tenant farmers renting in land for subsistence and those who hoped to improve their living conditions; although the former, obviously, had to pay higher rental rates. The authors hold that in Tianshui and Kaolan (2), where share rent was prevalent, the difference in rental rates might be linked to production responsibilities.

Share rent is a tenancy arrangement under which the landlord and tenant share production responsibilities and outputs as well. Therefore, the share proportion is usually linked to some extent to the production responsibilities shared by the parties and the varieties of crop.¹⁵ Under share rent in Northwest China, tenants had to pay rent via a certain proportion of all outputs harvested on the rented land. For example, if the tenant sowed wheat in spring and planted corn or millet after harvesting wheat in summer, the outputs of both crops would be shared with the landlord. Of course, there were some exceptions, for example, a few tenants increased the proportion of, or even gave all, opium output as rent, or paid rent with opium planted on their owned land so as to cut down the rental rate for cereal crops such as wheat and millet planted on rented land. In Kaolan (2) and Tianshui, the rental rates were some 50% for tenant farmers renting in land for subsistence, and only 25–40% for those hoping to improve their living conditions. Decreasing rental rates with the increase of rented-in land area might be linked with the better operation abilities of those tenant farmers who rented in land to improve their living conditions. This type of tenant farmer could input production factors, such as seeds and tools, themselves, and thus the landlord assumed less production responsibilities and accordingly shared less percentage of the output.

In Kaolan (1), Ningsia, and Hwangyuan, share rent and other forms of tenancy coexisted. Share rent was dominant when tenant farmers rented in land for subsistence. This was likely linked with production responsibilities too. These tenant farmers were relatively poor and could barely acquire the inputs necessary for production, so they had to select share rent to obtain the support of input from the landlord. Except for Kaolan (1) where the rental rate was unknown, outputs were shared between landlord and tenant at a proportion of 40:60% (40% for tenant and 60% for landlord) in Ningsia and around 50% in Hwangyuan.

¹⁵ Shi Jianyun (1998).

6.6.2 *Negotiation Ability*

In Wuwei, where a cash crop rental system was common, tenant farmers who rented in land to improve their living conditions enjoyed advantageous rates. However, the estimation of rental rates under the cereal rental arrangement is very complex and requires ascertaining the crop varieties and amount per mou paid by tenants. As there were no uniform units of measurement across different regions of China at that time, comparison is feasible only after data were converted to uniform units.¹⁶ In addition, due to differences in land fertility and yield, the rental per mou may not accurately reflect the rental rates. Fortunately, in the statistics for crop yields, beside per mou yields of the year, Professor Buck also recorded in detail the “most frequent yield,” “normal yield,” and “best yield” of each sample farm household. These represented the “yield most often obtained within 10 years,” “yield obtained under all conditions favorable for the crop,” and “yield obtain[ed] under optimum conditions,” respectively. The “most frequent yield” likely smooths differences in per mou yield across good and bad years caused by objective factors such as land quality, so the ratio of per mou rent to most frequent yield may more accurately and reasonably reflect the rental rates.

In Wuwei, most part-owner tenants paid rent under a cereal rent arrangement, usually with wheat as rent-in-kind. Observed only from rental amount per mou, the rental rates were different among tenant farmers, from 1 dou per local mou to 1.5 dou per local mou (1 dou per local

¹⁶The standard of weights and measures, mou system and measuring vessels at that time differed greatly across different regions of China. In Buck’s original data, units of output, area, distance, and currency were quite complex. For example, units of output were expressed in jin (斤), dou (斗), dan (担), and dàn (石), unit of area was local mou, distance was expressed by an unnamed local unit, currency units included Diao, Yuan, and Silver Yuan (Yin Yuan). These units not only differ from the metric system but also across regions. In other words, jin in different places does not equal *shi jin* and is converted to the metric system at different ratios. During the process of sorting Buck’s original data (see Chap. 4), the research group obtained relevant figures of output and areas by referring to the conversion ratios between jin in different regions and the metric kilogram, and to that between local mou and *shi mou*/hectare, as recorded in detail by Buck in his book *Land Utilization in China*. Meanwhile, through calculation and comparison of the mean values recorded in the original data for different regions with the mean values that had been converted to metric units in *Land Utilization in China*, the research group obtained the conversion ratios between jin, dou, dan, and dàn for different crops and the metric unit kilogram, the conversion ratios between local unit of distance and metric unit meter, and the corresponding currency conversion ratios.

mou is equivalent to approximately 37.03 jin/mou). Further calculation of the ratio of per mou rent to most frequent yield revealed that the rental rates ranged from 16.67% to 37.50% of most frequent yields and were lower for tenant farmers who rented land to improve their living conditions. This might be explained by their advantage in owned land resources which granted them a favorable position in the negotiation with landlords over rental rates.

6.6.3 *Risk-Resistance Capacity and Rent Sensitivity*

In Kaolan (1) and Hwangyuan, where cash crop rent and other tenancy systems coexisted, tenant farmers who rented in land to improve their living conditions mostly preferred to cash crop rent. This might be explained by their higher risk-resistance capacity.

Rental rates in Kaolan (1) are unknown. The situation of rent-in-kind in Hwangyuan was quite complex. Some tenants paid rent with barley or horse bean once a year, while others paid rent twice a year with barley/broad bean and soybean/wheat. The per mou rental rates calculated with regard to crop products varied due to the difference in price of crop products, but, basically, the amount of rent paid once a year was approximately twice that paid twice a year. Moreover, as the market price of wheat was higher, the rental rate expressed with wheat (1 dou/local mou) was relatively lower (1 dou/local mou equivalent to 80.01 jin/mou) than those expressed in other crop products, which ranged from 2 to 2.5 dou/local mou. As observed, simply from the absolute value of per mou rent, the rent burden for tenant farmers in Hwangyuan was obviously heavier than that for those in Wuwei. Nevertheless, due to possible differences in yield level between these two areas, it is necessary to further compare the ratio of rent amount to most frequent yield.¹⁷ Rent-in-kind accounted for around a third of output where rent was paid twice a year, and about 50% and 70% if paid in barley and horse bean, respectively, where rent was paid once a year. Obviously, the rent burden for tenants in Hwangyuan area was much heavier compared with that in Wuwei. The authors consider that this might be explained by the lower rent sensitivity of tenants in Hwangyuan due to relatively more abundant land resources and lower pressure of subsistence.

¹⁷ Buck defined the estimation duration for usual yield as ten years, so for all peasants who grew crops for less than ten years, the data were recorded as “U” (unknown). The usual yields of a few tenant peasants in Huangyuan was unknown and were substituted for by the per mou yield of the year.

6.6.4 *Pressure of Subsistence and Crop Varieties*

As presented in Table 6.7, in some areas, cash rent was prevalent among “subsistence-type” tenant farmers, while in other areas it was prevalent among tenant farmers who rented in land to improve their living conditions. Though the rental rates under the cash rent system are unknown, the fact this system was used for such diverse cases might be related to the pressure of subsistence and crop varieties.

It is generally considered that cash rent is closely related to a commodity economy and adopted for land which is used to grow economic crops or wheat.¹⁸ This is confirmed by the use of cash rent in Kaolan (2) and Wuwei, where nearly all tenants paying cash rent were those who: (a) rented in land to improve living conditions; (b) lived above subsistence level so were not under this pressure; (c) were involved in no off-farm employment; (d) grew higher value wheat, tobacco, and opium on rented-in land; and (e) sold 20% of their wheat and almost all tobacco and opium to obtain a cash income.

The case in Gaoalan (1), Tianshui, and Ningsia, however, was quite different, as cash rent was only widely adopted here by “subsistence-type” tenant farmers. Facing greater pressure, this type of farmer grew coarse cereals such as millet,¹⁹ instead of economic crops. This would provide a sufficient food supply targeted to meet the demand of subsistence to the maximum extent under the environment of an undeveloped commodity economy. All crop outputs, instead of being sold, were used to feed the family.²⁰ In Tianshui, cash rent was only adopted by landless tenant farmers, who rented in land to grow coarse cereals such as kaoliang, corn, and millet to feed the family. On the premise that Buck omitted no data on sale of crop outputs, the money for cash rent might come from off-farm employment. These “subsistence-type” tenants used their limited area of cropland to grow low-value coarse cereals, which were not likely to make

¹⁸ Shi Jianyun (1997).

¹⁹ Based on the original data of Buck’s survey, we find that in Northwest China where commodity economy was not well developed, small peasants (whether they rented-in land or not) preferred to plant coarse cereal crops. On the one hand, this decision was likely to be linked to the quality of their land, and, on the other hand, the higher unit output and calories of coarse cereals could more easily meet family demand for foodstuffs.

²⁰ As mentioned, in Buck’s original household data, the quantity of output of each crop sold by each sample farm household was recorded in detail under “Quantity of Outputs for Various Usages by Crops.” The authors find that no tenant peasants under the cash rent arrangement sold their crop output—it was all consumed by their family.

enough to pay land rent after much was used to feed their families. Therefore, they had to transfer surplus family labor to off-farm employment and earn off-farm income to pay land rent while balancing the pressures between land and people.

6.7 CONCLUSIONS

In this chapter we have shown that tenancy in Northwest China during the Republican era was not well developed on the whole. Most of the very few cases of land leasing occurred due to the pressures between land and people. A portion of large part-owner farmers with rich land resources leased in and operated land to meet the requirements of cropping structures. In other instances land leasing was used for subsistence-type farming, characterized by limited land area, production work performed mostly by family members, and heavy reliance on off-farm employment for subsistence. As for the tenancy system, share rent, cash rent, and cash crop rent were adopted in Northwest China to different extents, with share rent dominating on the whole in proportion to the number of tenant farmers in the area. In addition, influenced by production responsibilities, negotiation ability, risk-resistance capacity, rent sensitivity, pressure of subsistence, and crop varieties, the tenancy system and rental burden for tenants under these two types of leasing were different.

Of course, this study is not the end point for research on issues of tenancy and the tremendous and complex original data of Buck's survey, which require more effort from academic circles. Further research in more detail and across more regions is required. Moreover, a comparison study of Buck's data with other historical data for the same period may provide more definitive answers to issues pertaining to agriculture and the rural economy of modern China.

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