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THE NEW AGRICULTURE OPERATIONAL SUBJECTS: CAPITAL ACCUMULATION AND AGRARIAN TRANSITION IN RURAL CHINA

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The New Agriculture Operational Subjects: Capital Accumulation and Agrarian Transition in Rural China

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

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Abstract

In recent years, China's agricultural production is undergoing a dramatic transformation. This dissertation intends to explore the China's agrarian transition through a case study of an agricultural township in the south part of Anhui province. It has found that the peasant economy is in accelerated disintegration and its dominant position in China's agricultural production is being replaced by the capitalist agricultural production, which is perhaps the most distinctive characteristic of China's agricultural production in recent years.

Through the review of the rural policy documents, I find that the collective land system in rural China has already mutated since the establishment of Household Responsibility System. And this situation has been further aggravated after the implementation of the "separation of three rights relating to land" (*Sanquan fenli*). The land in rural China, essentially, has been commodified with the institutional designs, but is still owned by the collective economic organization namely. It is in this sense that I argue that the collective land system cannot hinder land concentration, but speeds up the land separation from the peasant households in a non-violent way.

Along with the commercialization of farmland, China's small peasant class has experienced the differentiation and disintegration and has been replaced by four types of new subjects of agriculture, that is the capitalist farmer, petty-capitalist farmer, medium farmer and the small-scale farmer. The capitalist farmer, pettycapitalist farmer and a small number of upper- and mid- medium farmer are composed of the leading group in the capitalist agricultural production system, while the lower-medium farmer and the small-scale farmer are in a subordinate position in this system. With the differentiation of the small peasant class and the entrance of the "capital beyond the countryside", a farm labor market has emerged in China's agricultural production sector. The labor buyers are the capitalist farmer, petty-capitalist farmer and the "capital beyond the countryside", while the labor sellers are the lower-medium farmer and the small-scale farmer. The formation of this labor market indicates that the labor force has also been commodified.

The commodification of farmland and labor signifies that the preconditions for the development of the capitalist agriculture production have been satisfied. Further, I prove that the so-called "superiority" of peasant economy does not marginalize the capitalist producers, rather provide them with the preconditions for the latter's enterprise development. Besides, according to their own power, capitalist agricultural producers will employ diverse capital accumulation strategies. They will accumulate capital not only in the field of production, but also in the field of circulation and from the various government agricultural projects. These diverse capital accumulation strategies suggest that the capitalist production not only can permeate into the agricultural sector, but also can realize the expand reproduction. It also proves that the capitalist agricultural producers can defeat the peasant family farming.

However, the agrarian transition would not be carried out smoothly. In fact, it is filled with fight or collusion among different actors around the competition of resources, including land, labor, agricultural machinery services, agricultural products, as well as government subsidies and hand-outs. I argue that the scale agricultural producers, upper-and mid- medium farmers and the grain traders are composed of a community of interest and are forming into a "class for itself". While the lower-medium farmers and the small-scale farmers are still in a process of struggle over a class. With the deepening of the agricultural capitalization, these two groups will be involved in the sharp struggle. The future picture of China's agriculture will be the outcome of this struggle.

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The Conversion of Weight and Area

1 Jin = 500 gram

1 mu = 0.067 ha or 0.165 acre

Chapter 1: Introduction

Background: China's Agrarian Question and the Debates

After the de-collectivization of China's rural economy at the end of the 1970s, China's agriculture had experienced a short period of prosperity with the support from the State – the "No.1 Policy Document"¹ from 1982 to 1986 was concerned with agriculture and rural areas. China's agrarian question seemed have been temporarily solved with the establishment of the Household Responsibility System (hereafter, HRS). After the initial success in the rural area, the State moved its emphasis to the reform in the urban area. Thus, from the mid-1980s to the end of 1990s, agriculture and the rural areas of China became a forgotten land.

In 2000, Li Changping, a former township secretary of Communist Party of China (hereafter, CPC), wrote a famous open letter to the former Chinese Premier Zhu Rongji. In this letter, Li stated bluntly the real situation in rural China – "the peasants' life is extremely bitter, the countryside is extremely poverty-stricken, and the agriculture is extremely precarious" (*nongmin zhenku, nongcun zhenqiong, nongye zhen weixian*) (Li, 2001). These are the so called "sannong" issues. Since then, "sannong" became the urgent problems with which the State has to deal properly. Mainly because of this letter, the emphasis of the State again turned to the rural areas of China. From 2003 to now, all the No.1 Policy Documents basically concern the issue of increasing the income of peasant households, the development of the rural areas and the promotion of agricultural modernization.

Meanwhile, with the widening gap between urban and rural areas, many young rural labors are inclined to migrate out for non-farm jobs. The left behind women

¹ "No. 1 Policy Document" is the first policy statement issued by CCP Central Committee and State Council every year, which indicates the most important issue and the key work of that year.

and elderly have become the main labor force in agriculture production. It is said that about half of the farming population are the laborers aged over 45 years old (He, 2013:25-31). What's more, the whole farming population is declining, dropping from 320 million in 2001 to 196 million in 2010, and declining by an average of 12 million each year (Huang and Gao, 2013: 56). So, "Who's going to farm the land (*Shuilai zhongtian*)" has become an urgent question in China.

China's agrarian question has emerged again and sparked hot debates among scholars. With their different views on China's agriculture development, He Xuefeng (2014), a famous "sannong" scholar, divides these scholars into two polarized groups: one is "Agricultural Modernization School" or "Radicals", the other one is "Peasant Economy School" or "Conservatives".

The dominant discourse about China's agriculture development is controlled by the "Agricultural Modernization School". This school is mainly constituted of mainstream economists, who are called neo-liberals. They actively champion the power of the market, and argue that the "sannong" issues are representations of institutional problems. It is the unreasonable institutional factors, mainly the HRS and the Collective Land System, that impede the free movement of resources between urban and rural areas. The "sannong" issues are intertwined with China's industrialization and urbanization, as well as the urban-rural dual structure. The only solution is to expand the function of the market and to perfect the market system. When it comes to the "sannong" issues, the "Agricultural Modernization School" argues that with the rural-to-urban migration and the dwindling of rural residents, the problem of "who's going to farm the land" has appeared as an urgent question for China. The peasant economy is economically not sustainable, and national food security cannot be ensured by the "gray-hair agriculture" (Laoren nongye). Thus, China's agriculture must be modernized on the basis of larger scale production. For all this, the government should effectively promote the circulation of farmland, even privatize the farmland, to reach large-scale agriculture

production. This would, encourage the flow of capital to the countryside, and cultivate the New Subjects of Agriculture (*Xinxing nongye jingying zhuti*, hereafter, NSAs) with financial and policy support. In one word, these scholars strongly advocate large-scale agriculture production, and a capitalist agrarian development policy approach.

The above arguments meet with fierce opposition from the "the Peasant Economy School". The scholars of this school argue that China's current institutional arrangements, the urban-rural dual structure and HRS, have made a great contribution to the rapid development of Chinese economy, rather than impede it. It is the peasant family farming and rural area that function as a stabilizer and a resource reservoir for China during its rapid modernization: on the one hand, a large pool of cheap labor is provided to the urban and coastal regions and paid below value under the conditions of global capitalist competition, and, on the other hand, the land system serves as a haven for the elderly migrant workers and those who fail to settle down in the cities. Thus, the baseline for China is to persist with the current institutional arrangements, especially the HRS, and only needs to make some necessary improvements for them as times change.

The "Peasant Economy School" reject strongly the large-scale agriculture production route. Firstly, once China carries out the large-scale agriculture production, near 100 million of the agricultural population will have been evicted from the agricultural sector. So the following question is whether the municipal or industrial sector could provide enough nonfarm employments for this landless army? If it can't, the landless army will have to stay in urban slums, which would not only do them harm, but also endanger social stability. Secondly, it is hard for the large-scale agriculture production to ensure the national food security, due to its relatively low grain yield compared to the peasant family farming. In fact, the "gray-hair agriculture" is much more efficient than the large-scale production (He, 2013: 25-31). China's intensive and meticulous peasant family farming can gain a

much higher crop yields than the world average. It is the reason why China can feed 20% of the world population with only 7% of the world's arable lands (He, 2014). With the question of "who's going to farm the land" in the near future, the "Peasant Economy School" regards it as a 'fake' question. They think that the older migrant workers and those who fail to settle down in the cities will naturally move back to the land, and the number of these people is not insignificant.

The pro-peasant advocates also hold a negative view of the capital flowing to the countryside. Tong Zhihui and Wen Tiejun (2009:9) worry that once the urban industrial and commercial capital flows into the countryside, it will bring about a type of agricultural marketization dominated by the capital held beyond the peasant households. Under this situation, the peasant households would be marginalized and locked into agricultural production as laborers, and would not gain profit from the agricultural processing, marketing, and distribution. Similarly, He Xuefeng (2013:31) argued that "the government should impose restrictions on capital flowing into the countryside, for example, forbidding urban capital to grow the grain crops, rather than encourage and support it entering into processing, marketing, and distribution". It is mainly because the capital will scramble for profit over the welfare of peasant households.

In fact, the debate between the "Agricultural Modernization School" and the "Peasant Economy School" refer to the choice of approaches to solving the agrarian question. Bernstein (2002:434) argues that there are three approaches to solve the agrarian question. That is, 1) "the capitalist oriented approach" which tries to encourage the development of the capitalist agriculture; 2) "the Marxist oriented approach" which tries to organize the peasants into a form of collective production; 3) "the populist oriented approach" which proclaims the superiority of the peasant family farming, and advocates state and policies to support the peasants. In this sense, "Agricultural Modernization School" is enthusiastic about the

capitalist oriented approach, while the "Peasant Economy School" adheres to the populist oriented approach.

However, these two schools' scholars share more common points than differences. Firstly, they have the same judgment on the current situation of Chinese agriculture, that is, that peasant family farming still holds a dominant position in agricultural production. What differs is their attitude towards peasant family farming: the mainstream economists criticize the inefficiency of peasant family farming, while the pro-peasant not only speaks highly of the efficiency of peasant family farming, but also its role as a stabilizer and a reservoir for China's economy and society. Secondly, they both consider the Chinese peasantry as a homogenous group relative to the urban residents under the urban-rural dual structure. Either the "big householders", who cultivate hundreds of mu or even thousands mu of land, or the "small peasants", who own no more than ten mu of land, they are both included in the term of "peasantry" with no distinction. Thirdly, they have same attitude towards capital flowing into the countryside itself. Although objecting to capital entering agricultural production, the Peasant Economy School virtually are not against the capital flowing into other aspects of agriculture, including processing, marketing, and distribution. Furthermore, the affinity between pro-peasant advocates and mainstream economists are more clearly represented to the spontaneous capital accumulation or entrepreneurship from Chinese peasantry. In this sense, "those on the populist side do not oppose capitalism in principle, but they are more cautious about the disastrous impacts of capitalism and, to some extent, represent the humane side of capitalism" (Xu, 2014:198).

From the above dispute, some doubts arise. Firstly, will the peasant family farming still hold a dominant position in Chinese agriculture production? If not, then which kind of agricultural production mode will displace the peasant economy? And in this process, which factors will play a role? Secondly, is the Chinese peasantry still a homogenous group? If not, then how has the peasantry changed in the 30 years

since de-collectivization, what types of farmers will emerge, and what does this change have to do with China's agrarian transition?

Debates on China's Agrarian Transition and the Limitations

The State has already cultivated and supported the "dragon-head" enterprises in agriculture sector since the mid of 1990s, aiming to integrate the millions of small peasants into the national market. During the early stage of this new century, the State has begun to encourage urban industrial and commercial capital to flow into the countryside to transfer farmland and develop modern agriculture. With the influence of such state policies, Chinese agricultural production has experienced a great change, that is China's agrarian transition, which has attracted the attention of some scholars.

Forrest Zhang and John Donaldson were the first scholars to have a discussion on China's agrarian transition. Based on their fieldwork in Shandong and Yunnan provinces, they argued that agrarian capitalism is expanding in China's agriculture with the rapid development of factor markets, especially the market for farmland, labor and capital (Zhang and Donaldson, 2010: 463-464).

The first main argument of these two authors is that agribusiness companies are the main impetus for China's agrarian transition (Zhang and Donaldson,2008:43; 2010:463). With the penetration of agribusiness firms into agriculture, they claim that China's peasants have been differentiated into six categories, each with a different scope of control over labor and land and different relations with agribusiness firms (Zhang and Donaldson,2008:32;2010:465-467). The first category is that of commercial farmers, "who are producers in the simple commodity form of production —households that specialize in production for nonlocal markets and whose reproduction is all through commodity relations" (Zhang and Donaldson, 2010: 469). The second category consists of the entrepreneurial farmer. Different from commercial farmers, these farmers' agricultural operation boundary surpasses the household with the hiring of nonfamily wage labor and renting in the land. "Entrepreneurial farming constitutes a capitalist form of production" (ibid. 472). The third category is that of the contract farmer. As the name suggests, these farmers have a contract with the agribusinesses. They still have control over their own land and labor, but they have to produce with the requirements of the company and sell their products to them. The contract farmer mainly relies on the company. The "semiproletarian farm worker with Chinese characteristics" constitutes the fourth category. This form is a unique outcome of China's socialist rural land system. When the agribusiness firms want to rent land from the village, they have to hire the villagers as workers in their production base. The fifth category is that of semiproletarian farm worker. Under this from, the peasants sell labor in the agribusiness firm, but they still own some means of production in their own villages. The last category is the proletarian farm worker, who are proletarian in the full sense, and without owning any means of production. In Summary, these six categories are "various forms in which agribusiness companies are conducting transactions with individual agricultural products" (Zhang and Donaldson, 2008:26).

The second main argument is that China's unique socialist rural land system is a powerful institutional factor shaping the spread of capitalism in China's agriculture. That is, "collective ownership protects agricultural producers from domination, exploitation and dispossession by outside capital (agribusiness companies)" (Zhang and Donaldson,2008:44). It "constrains the form and extent of capitalism's penetration into agriculture, as well as the proletarianization of direct producers" (Zhang and Donaldson, 2010:481). As a result, "an army of landless vagabonds has not emerged" (Zhang and Donaldson, 2008: 44) in China while the agrarian capitalism is expanding, which Zhang (2013) named it as

"commodification without proletarianization".

Furthermore, according to peasant household combined positions in four markets -- land, labor, means of production and products, Zhang (2015) identifies five agrarian classes: the capitalist employer class, the petty-bourgeois class of commercial farmers, two laboring classes of dual-employment households, wage workers, and subsistence peasants. With this identification, he intends to explore how the dynamics of agrarian change – accumulation, commodification and state intervention – drive class differentiation in rural China.

Similar to Zhang and Donaldson, Philip Huang and his partners (Huang, Gao and Peng, 2012) also argue that the most distinctive characteristic of the recent agricultural development in China is the phenomenon "capitalization without proletarianization". Huang (2010:127-137, 2016) asserts that China has undergone a "hidden agricultural revolution" in the past 30 years, that is, the agriculture structure has switched from "old agriculture" (mainly grain, cotton and oil crops production) to higher-value "new agriculture" (mainly vegetables, fruit, meat, poultry, fish production). This transformation of the production pattern has led to a high degree of "capitalization" in China's agriculture. However, the capitalization trend has not been accompanied by proletarianization, as the classical theory of agrarian transition expects. Through analyzing some national statistics, Huang, Gao and Peng (2012:19) conclude that "long-term agricultural workers account for 3 percent of total input in agriculture (and short-term workers another 0.4 percent)". According to their analysis, there are two main reasons accounting for this "paradoxical" phenomenon. First, the new "half-worker halfcultivator" model reinforced the persistence of family production, and protects the Chinese peasant from proletarianization. Second, similar to Zhang and Donaldson, it is the systemic factors, mainly the collective land system and HRS, that impede the complete "proletarianizing" of family farmers (Huang, Gao and Peng, 2012:24-27).

Disagreeing with Zhang and Donaldson, Huang and Gao (2013:37) argue that "capital investments necessary for agricultural development have in fact come mainly not just from private firms or state investment, but even more from peasant family farms, and have been drawn mainly from the wages earned by peasants working off-farm", which they call "blood and sweat capital" (Huang and Gao, 2013:56). In other words, it is not agribusiness companies or the state, rather the peasant households that are the main force behind China's agrarian transition. Here, the peasant households are not the family farm in Chayanov's meaning, but "capital and labor dual-intensifying" family farms (Huang, 2010:159).

Furthermore, Huang (2012:96) argues that the capitalist "dragon head" enterprises have already flooded into agriculture with a huge amount of support from the central and local governments. However, due to two constraining conditions, the relatively high labor price and the difficulty of supervision, these enterprises employed the "company + family production" model, rather direct scale production with hired labor. Confronting this form of "vertical integration", Huang and his partners (Huang, Gao and Peng, 2012:28) worried that it "could lead finally to the classical model of capitalization cum proletarianization". Based on the above arguments, Huang (2014:189-190) believes that the correct path for China's agricultural development should be "the appropriately scaled, 'small and fine' genuine family farms". Meanwhile, the state should support these family farms and integrate them into the cooperatives (Huang, 2010: 138-139).

Meanwhile, "The Central China School of Rural Studies" (*Huangzhong xiangtu pai*, HZXTP) has also had some influential discussions on China's agrarian transition. The HZXTP discussions are based on one judgment, that is, the peasant family farm still holds a dominant position in Chinese agricultural production. "The current Chinese agriculture is still a big ocean of peasant economy. To be specific, there are still 0.2 billion peasant households cultivating their own

contracted land, which amounts to about 70% of the total farmland in China. Meanwhile, about 20% of the total farmland is transferred due to peasant households' move to urban as migrant workers (He, 2015:42)". In these scholars' views, either "left-behind economy" (*Liushou jingji*) (Feng, 2013), "middle peasants economy" (*Zhongnong jingji*) (He, 2011; Liu & Yu, 2014; Tan & Sun, 2014), or "flowing family farm" (*Liudongxing jiating nongchang*) (Yu & Liu, 2013) are all deemed to be other types of Chinese peasant economy and represent the remarkable vitality of the Chinese peasant economy.

Based on the above judgment, these scholars insist that the major impetus of China's agrarian transition is the government. He Xuefeng (2015a:15), the core leader of HZXTP, states briefly that, the main driving force of the current agrarian transition is located in the difficulty of transfer payments from the state to 200 million scattered peasant households. Thus, in order to solve this difficulty, the government plans to support the new subjects of agriculture, which are appropriate scale "family farms" and number about 20 million households. In other words, these scholars have treated the agrarian transition as a result of the Chinese government's agricultural development strategy: an institutional change guided by the government (Feng, 2015a; Gong, 2015; Sun, 2015). Similar to Huang, these scholars approve the natural rationale of family engagement in agricultural production (Sun, 2013:59; He, 2015:43), and are the "middle peasants" rising from the spontaneous land circulation between peasant households. Furthermore, they claim that the government should give a greater support to the appropriate scale middle peasants, and help them to solve the difficulties they meet in production, especially the common problems of agricultural production, e.g. irrigation and agricultural machinery services (He, 2013:36).

A very different picture of China's agrarian transition is depicted by Rene Trappel (2016:1) who argues that "commercial and industrial agrarian production structures are now mushrooming everywhere in the countryside" after China's de-

collectivization. No doubt, Chinese agriculture is experiencing an agrarian transition. A puzzle, however, arises. That is, how can agrarian capitalism rise given the continued existence of the collective rural land system and the HRS? Trappel argues that the core answer to this puzzle is the commodification of farmland.

Trappel (2016: 167) concludes that there are three potential misconceptions in existing debates on the nature of Chinese agriculture. The first misconception is that China's collective rural land system and HRS can protect the peasant households enabling them to avoid being dominated, exploited and dispossessed by agribusiness firms, as Zhang and Huang assert. On the basis of systemic examination of land policies in China, Trappel finds that the reforms of the central government to alter the collective land system, especially the land use right circulation, has allowed the commodification of farmland, which can be seen as a unique Chinese path of land concentration. With this metamorphosis, Trappel (2016:78) argues that the institutional framework of collective land and the HRS have already been transformed into the basis of a modernized and commercialized agriculture, rather than a protective institution for peasant households.

The second misconception is that China's peasant economy can remain persistent for a long time and even move towards prosperity. It only needs the state to clear away the negative external influences on it, as the HZXTP assumed. Trappel rejects this argument. Taking education and health care as examples, Trappel (2016:81-84) finds that the need for monetary income has become tremendous in Chinese rural areas since the Reform. The demand for monetary income leads to peasant differentiation and the diversification of their income sources, which results in the declining proportion of agricultural income in peasant households. Besides, the small size of the plots and the lack of subsidies, capital and specialized expertise all come together and turn China's peasant economy into a very frustrating experience (Trappel, 2016: 87-94). With the frustration of China's peasant economy, two effects have arisen. The first one is the abandonment of smallholdings with the large scale of labor migration, and the second one is the devaluation of land use rights as they no longer function as the major means of livelihood for peasant households (Trappel, 2016: 94-96). Thus, it seems a feasible option for peasant households is to transfer their land use rights.

The last misconception is that the increase in agrarian capitalism in Chinese agriculture is a natural process in an increasingly market-oriented society. In Trappel's opinion, China's agrarian transition, especially the promotion of land transfer, is not a natural process, but an administrative-driven process. Local governments play a positive role as agents in this process of change and are active in addressing the various pressures, including financial, political and moral pressure, in a single stoke (Trappel, 2016:117). Through the land transfer cooperatives and land transfer service centers, the local governments promote land transfer on a large scale. As a result, the farmland in rural China has been commercialized and a market for farmland is emerging.

All in all, Trappel (2016:169) claims that "the frustration of the peasantry, the agenda of the state, and the interest of commercial actors create a special dynamic for the transformation of agriculture in China".

Undoubtedly, the work of these scholars has filled a blank in the research on China's agrarian transition. However, some issues remain. To summarize, there are four main issues.

Firstly, the scholars only notice "capitalization", but not the "proletarianization" process. Whether "commercialization" or "capitalization", Zhang and Huang have recognized the tendency towards capitalization in China's agricultural production. However, they believe that this is "without proletarianization" during China's agrarian transition due to the collective rural land system and the advantages of

peasant family farming. To this judgment of "without proletarianization", Yan Hairong and Chen Yiyuan (2015) strongly disagree. These two scholars mainly doubt the method Huang adopted to estimate the importance of wage labor. They state that "Huang et al. define the rate of agricultural proletarianization by calculating the weight of wage labor input (time) in the total agricultural labor input of all households, regardless whether they employ wage labor or not" (Yan & Chen, 2015:383). This method does not help to reveal the weight of wage labor in Chinese agricultural production, but obscures it. On the contrary, they estimate there is "a much higher rate of wage labor use – about 28 per cent of the total labor in 'family' farms, excluding, employment of short-term labor" (Yan & Chen, 2015:383). Hereby they claim that the reality of China's agrarian transition is capitalization with proletarianization. From a different viewpoint, Trappel also questions Huang and Zhang's argument. Documenting the land policies of China, Trappel (2016:52) finds that China's rural collective land system and HRS has already been altered, "from a system of egalitarian distribution of land to the basis of commercial operations in agriculture". This institutional perspective will also be adopted by this dissertation to demonstrate the changing of China's agrarian relations and a rising land transfer market.

Secondly, they only see the "external dynamics", without the "internal dynamics". Whether Zhang, HZXTP, or Trappel, they all agree that the development of China's agrarian capitalism is just an outcome of government policies and the penetration of the industrial, commercial and agribusiness capital from outside. However, agreeing to the emphasis on "(agrarian) capital from beyond the countryside", Bernstein (2015:460) reminds us of a potential danger, "that is, invoking the powers of agribusiness capital to shape agriculture production … can marginalize … class differentiation and class formation within the countryside." Although taking the "peasant household" as the major impetus of China's agrarian capitalization, Huang et al. obviously confuse the "capital" or money that peasant households input into production with the Marxist "capital"

that agribusiness invests for productive accumulation. On the contrary, Yan and Chen identify three capitalist dynamics: a) Capitalist dynamics from above, represented by "dragon-head" enterprises; b) Capitalist dynamics from above and below, represented by rural cooperatives; and c) Capitalist dynamics from below, represented by "family farms". It is these three capitalist dynamics that facilitate the rise of agrarian capitalism in China.

Thirdly, the peasant economy still holds a dominant position in Chinese agricultural production. Huang and the scholars of HZXTP both argue that the peasant economy and its dominant position will persist for a long time. This judgement is closely related to the above two arguments, which leads to their neglect of the capitalism from the below, and their ignoring of proletarianization. Besides, they also admire the remarkable vitality of the Chinese peasant economy. Conversely, Yan Hairong (2015:16) argues that,

"The resilience of small peasants is questionable because, since the Reform, rural China has experienced a massive loss of residents, such that there is the phenomenon of hollow villages and gray-hair agriculture, and a worry about who's going to farm the land in the future. As for the nature of small peasants, today's small peasants are not the same as the ones in the 1980s … today's small peasants are directly or indirectly affiliated with capital, provide the capital with land or labors, or undertake the production process with high risks for the capital … Behind the seemingly form is the difference in essence, the different subjectivity. "

Similarly, Chen Yiyuan (2013:151) says that "with the huge number, the small peasants seem to hold a dominant position in rice production, but when comes to their position in the whole economic system, this position should be reconsidered". Trappel (2016) also believes the frustration of the smallholders. Based on the achievements of the above scholars, this dissertation intends to prove the

frustration of the peasant economy and argues that the so-called "half-worker halfcultivator" mode actually is a representation of this frustration.

Fourthly, there is the ignoring of peasant differentiation in the materialist sense by the scholars. In my understanding, all the above three issues originate from this oversight. Based on their pro-peasant position, Huang and the scholars of HZXTP still see today's small peasants as an undifferentiated group with tenacious vitality. Although Trappel pays attention to "peasant differentiation", the "peasant differentiation" in his work actually is the peasant differentiation in the sociological sense, and should be called peasant professional differentiation. It is also in this sense that the greatest weakness of Trappel's research is his neglect of the issue of agricultural wage labor (the commodification of labor). No doubt, Zhang emphasizes the significance of peasant differentiation. However, he treats the peasant differentiation as an outcome of agrarian transition rather a dynamic factor, which is mainly rooted in his argument that agribusiness is the major impetus of China's agrarian capitalism. Actually, either in his discussion of capitalist development in Russia or America, Lenin (1977[1899], 1974[1917]) already illuminated the pivotal role played by peasant differentiation in agrarian capitalism. Besides, T. J. Byres (2009:34) even more clearly argued that "differentiation of the peasantry is central to transformation: it is not an outcome but a determining variable, a *causa causans* rather than a *causa causata*". Thus, in this dissertation I intend to bring the peasant differentiation in the materialist sense back into the research on China's agrarian transition.

Theoretical Framework

The original concerns about the agrarian transition can be traced back to Karl Marx. In the first volume of Capital (Marx, 1990), Marx explored in detail the agrarian transition in England through the concept of "primitive accumulation". Marx argued that: in the history of primitive accumulation, all revolutions are epoch-making that act as levers for the capitalist class in course of formation; but this is true above all for those moments when great masses of men are suddenly and forcibly torn from their means of subsistence, and hurled onto the labour-market as free, unprotected and rightless proletarians. The expropriation of the agricultural producer, of the peasant, from the soil is the basis of the whole process. The history of this expropriation assumes different aspects in different countries, and runs through its various phases in different orders of succession, and at different historical epochs. Only in England, which we therefore take as our example, has it the classic form.

Marx, 1990: 876

Marx took England as a typical example to explain how the capitalist production relations are formed. After more than two centuries' enclosure movement, English peasants were violently expropriated the use rights of common lands, which were an essential condition for their reproduction. As a result, the self-supporting peasants were kept separate from their means of production and had to earn a living by selling their labor forces. Through various methods, not only did the capitalist conquered a large amount of land, but also gained the labor forces relying on the wage. Thus, with plenty of landless labor and the farmland rented from landlords, a capitalist farmer class has emerged in England at the end of 16th century. Meanwhile, with the destruction of the subsidiary trades of countryside, the manufacture was broken away from agriculture. Through this process, an extended and stable home market was provided for the capitalist mode of production.

Besides the "'peasant dispossession by displacement', or enclosure", Marx also noticed the "'peasant dispossession by differentiation" (Araghi, 2009: 118), that is the peasant differentiation. Marx written:

The transformation of rent in kind into money rent, moreover, is not only necessarily accompanied, but even anticipated, by the formation of a class of non-possessing day-labourers, who hire themselves out for money. During the period of its rise, when this new class still appears only sporadically, the custom necessarily develops, among the better-off rent-paying peasants, of exploiting agricultural wage-labourers on their own account ... In this way it gradually becomes possible for them to build up a certain degree of wealth and transform themselves into further capitalists. Among the old possessors of the land, working for themselves, there arises a seed-bed for the nurturing of capitalist farmers, whose development is conditioned by the development of capitalist production, not just in the countryside but in general.

Marx, 1991: 934-5

In short, Marx suggested that the capitalist farmer can also be raised from the peasant differentiation. Through these two ways, peasant was divorced from the materials of production. Thus, a new trigonal class structure was established in rural England: a landless rural labors class, a rich capitalist farmer class and a landlord class as rentier.

Marx himself did not directly generalize the English path of agrarian transition to other countries. In the first draft of "Marx-Zasulich Correspondence", Marx (1983:105) expressly pointed out that the "historical inevitability" of the process, a complete separation between the producer and means of production, and the expropriation of the agricultural producer, was restricted to the countries of Western Europe. This process is the transformation of one form of private property (peasant form of production) to another form of private property (capitalist form of production). That is, there could be existed different paths to establish or consolidate the capitalist production relations according to the different contexts. Marx took Russian as another example to explore the agrarian transition. Different from the lands in Western Europe, the Russian peasant lands have never been their private property, how this tendency (the agrarian transition) could be applied to them? Marx pointed out that the Russia agricultural commune contained two characteristics: collective and private. Thus, there are two alternative paths for Russia's agrarian transition: "either the element of private property which it (agricultural commune) implies gains the upper hand over the collective element, or the reverse takes place" (Marx, 1983:109-110). More specifically, the former one is the combination of the state and the "new pillars of society" eliminates the majority peasants by converting them into wage laborers, and fosters the less welloff minority to form into a rural middle class (Ibid,116); the latter one is the gradually transformation of the agricultural commune itself into "an element of collective production on a national scale" (Ibid, 106), which "enables Russia to build into the commune all the positive achievements of the capitalist system, without having to pass under its harsh tribute" (Ibid, 110). Furthermore, Marx reminded us that which way to be chosen depended on the different historical context. Thus, when applying his analytical framework, extracted from the England example, into the Russia context, Marx used it in a flexible way, rather path-dependent.

Engels (1968) also noted the peasant differentiation in the Europe. Like Marx, Engels clearly recognized that in the whole Europe only two regions, Great Britain and Prussia east of the Elbe, had the capitalist form of production been established and consolidated. Under such circumstances, "the development of the capitalist form of production has cut the life-strings of small production in agriculture; small peasant was (is) irretrievably going to rack and ruin". The European peasantries were already differentiated, and "consist (ed) of quite different parts which vary greatly with the various regions" (bid).

Kautsky and Lenin both took Marx and Engles' ideas into their researches. To some extent, we can say that it is the researches of Kautsky and Lenin that clarified the ideas of Marx and Engles.

Even though a bit different, Kautsky and Lenin both agreed that the first step in the establishment of agrarian capitalism "was the dissolution of peasant handicrafts through urban industry and commerce" (Kautsky,1988:14). In traditional time, the peasant family was essentially self-sufficient. They met all their needs almost by themselves. However, when urban capitalism grew and adopted the capitalist relations of production, the cheap manufactures gradually swarmed into the countryside, and would more rapidly with the convenient transportation. To paraphrase Marx and Engles, the cheap prices of urban manufactures were the heavy artillery with which it batters down peasants' selfsufficient. "The more this process forges ahead, and, the more native peasant domestic industry break up, the greater the peasant's need for money" (Ibid,15). It represented not only at the commodification of production, but also at the commodification of subsistence. Thus, Kautsky noted, "peasant economic existence, and with it peasant life in general, becomes impossible without money" (Ibid, 15).

To acquire money and survive, the peasants had to deeply engage with the market and competitively sell their products. In this sense, "all the peasant groups farming has to a large extent become commercial, has become dependent upon the market" (Lenin, 1977:155). The law of competition was inserted in the rural society. Without a doubt, a small number of peasant households could catch the chances of success, while the major ones would fail. The result was the gradual emergence of peasant differentiation.

In both Kautsky and Lenin, the peasant differentiation was significant. Especially Lenin (Ibid,70-187), he clearly divided the rural population into three classes: the poor peasantry, the middle peasantry, and the rich peasantry. Both in their eyes, the peasant differentiation can be considered as a key factor to establishing the

agrarian capitalism. With the emergence of property inequality, as Lenin (Ibid, 174) written, the older peasantry was ceasing to exist and being displaced by new types of rural inhabitants, that is, the rural bourgeoisie and the rural proletariat. The rural bourgeoisie was the winner in the market. This class had the money to improve their control of the material of production, and more important, to hire the labor forces to expand their operation. They were "not only blessed with advantages in production; but (it) also had (has) a number of advantages in the sphere of credit and commerce" (Kautsky, 1988:104). Thus, they became the principal provider of the commodity on the market, or the seller of foodstuffs (Ibid,173). Rather for the use value, they more inclined to the exchange value, which formed the basis to realize their agrarian accumulation. Whereas, deficit households were the loser in the market, and could not make their ends meet. To survive, they had to unwillingly sell their material of production firstly, especially their farmland, and secondly, had to sell their labor-power. As a result, the deficit households became the sellers of labour-power (Ibid, 173). In this sense, once was locked into this chain, the small farmers could hardly change their status as the rural proletariat, even though owning small plots of land.

In a word, not only a group of free hired labors, but also a home market was created with the differentiation of the peasantry. Thus, during the peasant differentiation process, the traditional landlord -- peasant rural structure would be displaced by the new rural bourgeoisie -- proletariat structure; more thoroughly, the previous relations of production would be transformed into the capitalist relations of production.

Following Marx, Lenin also paid attention to the question of different paths. Lenin separated two paths of agrarian transition, that is, the "capitalism from above" and the "capitalism from below" (Byres, 1996: 20-30). The former path was the Prussian path, based on "the internal metamorphosis of feudalist landlord economy" (Lenin, 1977 [1899]:32). While the latter one was the American path, derived from

"the free development of small peasant farming" (Ibid, 32-3). In brief, from Lenin, we can see not just the possibility of different forms of agrarian transition, but the genesis of agrarian capitalism: either from within peasant, or from without peasant.

Following the Marxist approach, the focus of this research is not on agricultural productivity, but on the relations of production in the Chinese agricultural sector, that is, the interpersonal social relations in agricultural production. Lenin (1977 [1899]:62-63) has already indicated that "it is not with 'production' that political economy deals, but with the social relations of men in production, with the social system of production. Once these social relations have been ascertained and thoroughly analyzed, the place in production of every class, and, consequently, the share they get of the national consumption, are thereby defined". I assert that the "agrarian transition" is the changing of social relations in agricultural production, including production, marketing, and distribution. It is in this sense that this dissertation adopts a Marxist agrarian political economy approach to explore China's agrarian transition. "Agrarian political economy economy approach to explore in agrarian formations and their processes of change, both historical and contemporary"(Bernstein, 2010:1).

Further, the above viewpoints can be operationalized into "Four Key Questions of Political Economy" proposed by Bernstein (2010:22-24). That is, a) Who owns what? To be specific, "how the means of production and reproduction are distributed". For agricultural production, the land, means of production and agricultural machinery are the most important. We should know exactly who owns the land and who uses the land; how the farmers acquire the means of production and agricultural machinery services. b) Who does what? This is about "social divisions of labor". To be specific, it involves the labor relations in the process of agricultural production, and the market relations in the process of circulation. Who hires the labor, while who sells his/her own labor? What structural positions are

the different subjects located in in the market? c) Who gets what? "The third question is about the social division of the 'fruits of labor', which is often termed the distribution of 'income'". It is mainly about the earnings from the ownership of land and the means of production, or the selling of labor. d) What do they do with it? "The fourth question is about the social relations of consumption, reproduction and accumulation". It mainly concerns the purposes of production; is it to maintain a simple reproduction of the family or family farm, or is it for productive accumulation.

This dissertation intends to explore China's agrarian transition mainly addressing the above four questions. We should be clear, however, that the four questions are just answering the question of "what", rather the question of "why". For instance, why some people or groups can control the land, and some people or groups cannot? Why someone needs to hire wage laborers in his/her farm management, while others do not. All those questions actually come to the question of a dynamic mechanism: the situation of "what" is shaped by which factors? Taking this into consideration, I try to focus on the following three factors: state intervention, peasant differentiation and class struggle.

State Intervention

Byres (1996: 6) argues that there are two central propositions in political economy: "the first concerns the primacy of class analysis within the political economy paradigm. The second turns on the role and nature of state". Throughout the historical agrarian transitions in Europe, American, East Asia and everywhere, the state always plays an omnipresent role during the process.

For Marx or Polanyi, the enclosure and privatization of farmland is the first stage of capitalist development. However, the rural land in mainland China is owned by the collective, rather than by individual peasant households. As the policy maker of rural land, the Chinese government can make a change to the collective land system, and ease the divorce between peasant household and land. By the same token, it can also maintain this collective land system and prevent the peasants from becoming landless.

After the de-collectivization, the state reformed the system of commodity circulation and facilitated the rapid expansion of commodity relations in rural China and in the Chinese agricultural sector. China's countryside and agricultural sector were first adsorbed into the national capitalist system, and then into world capitalism when joining the WTO. Thus, we cannot isolate the rural economy from the national economy, and also cannot split the relations between rural and urban areas. While taking these relations into consideration, we cannot neglect the state intervention as an important factor.

State intervention also cannot be neglected because of the urban industrial and commercial capital flowing into the countryside with the support of the state. Urban industrial and commercial capital act as an important external force to shape the structure of the rural economy and the agricultural production mode. This could not be imagined 20 years ago.

Taking this into consideration, the role of the state in changing the relations of production should be recognized and explored. In order to better understand the role of the state, I separate the state into "national" state and "local" state. Zhou Feizhou (2012:7) has already argued that "when comes to the empirical research, the first step of the analysis is to divide the government into central government and local government, which consists of the basic framework to get an understanding to the government's action". The main reason for doing this separation is that the "government … is highly localised" (Webber, 2008: 313).

Peasant Differentiation

Borrowing from Oya (2010:2), peasant differentiation is defined as "a process whereby inequality increases together with a growing fragmentation of labor into groups of people who increasingly depend on working for wages and groups who manage to accumulate a bit and employ other people's labor, and between groups who still depend on farm activities and groups who become increasingly reliant on non-farm sources of income". This concept contains two aspects: "the decline in their reliance on agriculture, known as 'deagrarianisation', and the erosion of the family basis of their livelihoods, sometimes referred to as 'depeasantisation'" (Ellis, 2006:387).

Those two aspects have been experienced by Chinese peasants after decollectivization. A peasantry has been recreated by the de-collectivization (Bramall and Jones, 2000: 262; Bramall, 2009: 343). At the beginning of Reform, China's small peasants had experienced in a short period of time increases both in production and income with the support of the government's price policy. With the expansion of commodity relations in rural areas, however, the agricultural production and daily life of small peasants has been gradually commercialized, which inevitably leads to the "simple reproduction squeeze" in the peasant family farm (Bernstein, 1977:64-65). Therefore, with "the silent compulsion of economic relations" (Marx, 1990:899), the Chinese small peasants are forced to leave the countryside as migrant workers to earn wage income. "China's rural population has experienced rapid deagrarainisation" (Zhang & Donaldson, 2010: 462). Meanwhile, however, Chinese small peasants have not experienced depeasantisation due to the collective land system. The left-behind elderly and women have served as the main labor force in agricultural production, and the main forms of production in China's agriculture are still the peasant family farm. Huang (2010) termed this family unit as "half-worker half cultivator" mode. With the capital flowing into the countryside, however, China's agricultural production itself has begun to change -- peasant family farming is replaced by the capitalist mode of agricultural production, small peasants are replaced by NSAs. Chinese small peasants are now experiencing rapid depeasantisation.

Of course, deagrarainisation and depeasantisation cannot be separated from each other completely. When the peasant household experiences deagrarianisation, the value of farmland to these peasant households decreases at the same time. So, many peasant households choose to give up agricultural production and transfer out their contract land spontaneously when they go out as migrant workers, which actually is the starting point of depeasantisation. Only after the intervention of state and capital has China's rural land begun to be commercialized and Chinese peasant households have started to experience rapid depeasantisation.

In addition, Bernstein (1977: 67) argues that a clear analytical distinction should be established between "*differentiation in sociological sense* – indicators of inequality derived from a problematic in which 'social class' is constituted in terms of some or other scale of privilege and deprivation, and *differentiation in the materialist sense* which poses class in terms of the social relations of production" To be specific, the first differentiation is a more descriptive concept, in which 'labor', 'capital' and 'land' are just recognized as discrete variables. As a result, "it is unable to indicate socially significant differences at the level of production". The second differentiation, however, "is tied to the conditions in which wealth becomes capital, when it is not consumed individually but productively through investment in means of production". It is a relational concept, that is, the success of the minority comes at the price of the majority. So, the differentiation in the materialist sense is one of quality. In this research, peasant differentiation is the second one.

Peasant differentiation also is a process of class formation, that is, the old small peasants collapse and pass away, while the new agrarian classes emerge and rise.

In contemporary China, the peasantry is differentiated into NSAs, who are the new agrarian classes that displace the small peasants. In general, these new agrarian classes can be divided into two groups – classes of capital and classes of labor. The former extracts surplus value from the latter and continuously expand their means of reproduction, while the latter can only maintain a subsistence livelihood by selling their labor and running their poor small family farms.

This dissertation will explore the emergence and growth of new forms of agricultural production through examining the peasant differentiation. In addition, based on the "Four Key Questions", I will picture the different structural positions of the different types of farmers and their prospects respectively in China's current agricultural production system.

Class Struggle

After the Reform, the class discourse was suppressed, even more in rural areas than in urban areas. With the perspective of "State-Peasant Relation", rural China was still largely seen as a settlement of "potato-like" small peasants, and the small peasants were also still seen as a homogenous group. This dominant viewpoint does not enable us to explore the various contradictions within the economy of rural areas.

However, with the transformation of agricultural production relations, the small peasants have undergone a more thorough differentiation: old agrarian classes continue to decline, while the new agrarian classes gradually rise. All kinds of contradictions generated within the rural economy have unfolded in the relations of production. Thus, it requires that we adopt a class analysis to examine the various contradictions within the economy of rural areas.

The rise of the new agrarian classes will not go smoothly because the old agrarian class will protect their interests with various methods. Thus, the struggles and collusions among different classes are unavoidable. Brenner (1976:31) argues that "the structure of class relations, of class power, will determine the manner and degree to which particular demographic and commercial changes will affect long-term trends in the distribution of income and economic growth – and not vice versa".

The struggle between agrarian classes directly relates to the two questions – who own what? and who gets what? The class struggle also relates to whether capitalist relations of agricultural production can be maintained, stabilized and eventually dominate China's agricultural production. The role played by the state in the class struggle should also be paid attention to.

Methodology and Fieldwork

Research Site

The fieldwork for this dissertation was carried out in P township², F County in southern Anhui province (Map 1 and Map 2). The total area of P township is about 91.6 square kilometers, of which 46,000 mu forest land, 58,600 mu arable land, 16,000 mu water area. The township has 13 villages and 2 neighborhood committees, the total population was 31,541 in 2015, of which 30,281 are classified as agricultural population, and 18,713 as labor force. P township is the only agricultural town in F County. Due to the lack of local industrial and commercial enterprises, most of the labor force in P township have moved out as migrant workers, just like in other poor towns in the hinterland of China. In 2014, about 11,250 people, accounting for 60% of the total labor force in P township,

 $^{^{2}\,}$ In accordance with academic convention, the real names and place names in this dissertation have been anonymized.

had left to find jobs in urban areas. Migrants mainly go to the cities in the Yangtze River Delta. Most of them enter into a factory or the construction industry, a small number engage in "*Paojianghu*" (salesmen). In 2014, the average per capita income of farmers in P township was 12, 524.3 yuan, while for migrant workers' it was about 48,721.7 yuan.

P township is clearly divided into two parts, west and east, by the river S which flows from north to south. The west part is a mountainous area, while the east part is a reclaimed area. From Map 2, we can see that most of the arable land is concentrated in the town's eastern part, with only a little arable land in the western mountainous area. In addition, there are three lakes in P township's eastern part, and some reservoirs in the western part. These lakes and reservoirs provide water for both domestic consumption and agricultural production. Because of this geographical environment, the agricultural production of P township is mainly concentrated in the eastern part. After the introduction of land circulation, the agricultural planting structure in P township changed from the previous double cropping rice to "rice/wheat". Generally, the mid-season rice is grown between late June to late November, while the winter wheat is cultivated between early December to mid-June.

In 2007, P township became a district to implement national agricultural development projects. From then on, P township gained great support from these projects and launched a tide of land consolidation and agriculture infrastructure construction. By the end of 2015, about 92% of the farmland in P township had been consolidated. Meanwhile, P township government seized the opportunity to actively carry out land circulation. From 2008 to 2015, about 57% of the farmland in P township had been transferred. The land transfers have made the agricultural production in P township undergo a great change. Beside the peasant households cultivating their own contract land, there are 4 "dragon-head" enterprises, about 40 farmers' cooperatives, and about 100 family farms. In 2012, P township was

named the "Modern Agricultural Comprehensive Development Demonstration Zone in Anhui Province" (*Anhuisheng xiandai nongye zonghe kaifa shifanqu*), and in 2013 was judged as the "Modern Agriculture Demonstration Zone in Anhui Province Level" (*Anhui shengji xiandai nongye shifanqu*).

Since 2007, the agricultural production in P township has undergone an enormous change in less than a decade. During this process, the forces of national, local, capital, together with farmers all became intertwined and struggled with each other, weaving out today's picture of agricultural production in P township. It can be said that P township is an excellent microcosm of China's agrarian change. It is in this sense that P township was chosen as the field site of this dissertation.

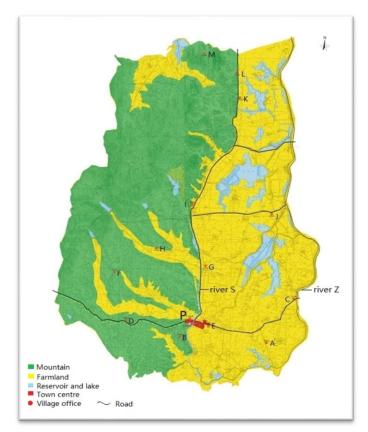
I have been to P township three times to collect information. The first time was in September 2014, when I carried out a two-week pilot survey to gain some preliminary information about P township. After choosing it as the field site, I went into P township the second time. On this occasion, I spent about 6 months there, from March to September 2015, to do the field work. In April 2016, I again went to P township to collect some supplementary information for two weeks.



Map 1: Location of Anhui province in China

Source: Google





Source: P township government

Research Methods

In this research, I mainly apply the ethnographic approach to studying the agrarian transition in rural China. A key assumption of ethnography is that "by entering into close and relatively prolonged interaction with people (one's own or other) in their everyday lives, ethnographers can better understand the beliefs, motivations, and behaviors of their subjects than they can by using any other approach" (Tedlock, B., 2000: 456). In this sense, ethnography is appropriate for this research. In particular, this dissertation mainly employs three research techniques: participant observation, in-depth interviews, and the documentary method.

As Atkinson and Hammersley (1994: 248) pointed out, "ethnographic methods, relying substantially or partly on 'participant observation', have a long if somewhat checkered career in the social sciences". It is in this sense that I adopted the participant observation to collect ethnographic data for a better understanding to the concrete practices or management strategies adopted by the NSAs and the dynamic interactions among these subjects. During my 6 month stay in P township, I visited the farm producers, observed their production situations, and followed them to buy seeds, fertilizers, pesticides and other agricultural materials. Besides these farming activities, I also looked at their non-farming periods, or disharmony lied in their quiet daily lives. It is these moments of disharmony that highlight the dynamic interactions among the different subjects of agriculture from time to time. Through these conjunctures, then as an outsider, I could get a glimpse of the intricate relationships hidden behind these subjects' quiet daily lives. In fact, only living in the community for a relatively long time, that a deep and friendly relationship with the villagers can be established, and hidden reasons for some actions will be uncovered by the researcher. Besides, by living with them, the impacts coming from the outside, the relationships among different subjects of agriculture and the changing processes of the agriculture production can be observed clearly.

Forsey (2010) argued that the ethnographers report more of what they hear in the field than what they observe, thus engaged listening should sit on an equal footing with participant observation during ethnographic research. In this sense, I adopted the in-depth interview with various agricultural operators. To some extent, the in-depth interview is the most important method employed in my research. Three main groups of people are interviewed.

The first group is the government officers, including the town officers and village cadres. These two kinds of officers are the direct executors of the related policies of land circulation and NSAs. It is always them bridging between the villagers and the NSAs on the land circulation market. By interviewing them on how they promote land circulation, how to support the NSAs, and how to ensure peasant households' rights and interests, that I can gain a better understanding of the role the local government played in the agrarian transition.

The second group is the various subjects in agriculture, including the NSAs, the middle peasants, and so on. In general, I mainly sought information on: a) the sources of the production capital, the farmland, and other materials of production; b) how they carry out the farming, relying on own family labor or on hired labor? If they need hired labor, how many laborers were needed, how much would they be paid, where do the hired laborers come from, how are these people hired? c) how they deal with the fruits of their own, self-consumption, or exchange in the market? d) the policy supports provided by the local government.

I also paid attention to the peasant households in P township. For them, I mainly wanted to know about: a) do they transfer in or out farmland and why? b) how they make a living after the land circulation? c) do they find a job to earn some wages from the new local farms.

The ago-dealers, the agricultural machinery service providers, and the grain traders were also interviewed. By doing this, I wanted to have an insight into the different situations of the subjects of agriculture from the whole grain industrial chain.

The documentary method was also adopted to collect all kinds of government documents, records, and reports. Besides, some scholars have already carried out research in P township. So, I also pay attention to review their research data³, which can serve as supplementary data to give me help in exploring the previous agriculture production situation.

This research mainly focuses on the agrarian transition in P township through the

³ I appreciate Sun Xinhua's selfless to share his research data with me.

angle of peasant differentiation and production relations. The questionnaire survey does not constitute an ideal method in this research. It may catch some social facts through the survey, but it is not enough. What I really want to understand is the dynamics process underlying the social facts. For this research, the dynamic process of peasant differentiation and the strategies that NSAs adopted are far more important than the peasant differentiation phenomenon itself. Another reason to refute the survey is the rigidity of this method. Using this method, the researcher will bring a rigid questionnaire into the field site, which will inevitably filter out lots of interesting or paradoxical phenomena.

The Extended Case Method

This research is a case study carried out with fieldwork in P township. Through the case of P township, I try to get a glimpse of China's agrarian transition. This "ambition" inevitably brings about the issue of "generalization", that is, I have to deal with the relations between micro and macro scales, and special and general specifics. I employ the extend case method proposed by Michael Burawoy (1998) to deal with the issue of "generalization".

The extended case method, "deploys participant observation to locate everyday life in its extralocal and historical context. The extended case method emulates a reflexive model of science that takes as its premise the intersubjectivity of scientist and subject of study" (Burawoy, 1998:4). The extended case method is established on the basis of "reflexive science" rather "positive science". In Burawoy's view, the relations of "reflexive science – extended case method" is similar to the relations of "positive science – survey". He vividly calls the former one "a craft mode of knowledge production", while the latter one "an industrial mode" (Burawoy, 1998:28). The main reason for Burawoy to develop and adopt the extended case method is "to extract the general from the unique, to move from the

'micro' to the 'macro', and to connect the present to the past in anticipation of the future, all by building on preexisting history" (Burawoy, 1998:5).

The extended case method is very important. In fact, if we still deduct the whole from a sample, the main logic of positive science, then the case study can never bridge the gap between micro and macro, special and general. Therefore, "if the case study tries to obtain a vitality and has the same status to survey, then it must follow its own unique logic" (Lu &Li, 2007:125)

Although the range of research only covers a common town in rural China, the town as a force field is already enough for us to explore the impacts of various social forces upon China's agrarian change, while a village is not enough. No matter how special P township is, it is undeniable that there are a variety of general social forces playing a profound impact behind this scenario. The agrarian change in P township is definitely shaped by the interaction between general social forces and local factors in P township. That is, there must be a macroscopic basis under the micro-sociological phenomenon of agrarian change in P township. It is in this sense that the gaps between micro and macro, special and general can be bridged.

The aim of this dissertation is to uncover these general social forces. As for the agrarian change, the most important three general social forces are state intervention, market, and local social forces, and their representatives are respectively local government, various types of agricultural and agribusiness capitalists, and the local peasant households. Generally speaking, the agrarian change in any place is an outcome of the interaction between these three social forces. This dissertation seeks to explore how the macro state and market forces affect the local microscopic picture, and how the latter in turn shapes the former two macro forces.

Outline of the Thesis

Besides the introduction and conclusion, the main body of this dissertation is composed of six chapters. The second chapter focuses on the commercialization of farmland. With the reform of the HRS, farmland is able to be transferred without changing the collective land system. The collective land system has not hindered land concentration, rather it has helped speed up the land separation from the peasant households in a non-violent way. The third chapter presents the differentiation and disintegration process of China's small peasant class. With the push of formal land circulation, China's small peasant has already completely collapsed and has been replaced by four types of new subjects of agriculture. The fourth chapter discusses the formation mechanisms and structural characteristics of the agricultural wage labor market. The formation of this labor market indicates that the labor force has also been commodified. In the fifth chapter, I have a dialogue with the pro-peasant scholars, and I will prove that the so-called "superiority" of peasant economy does not marginalize the capitalist producers, rather provide them with the preconditions for the latter's enterprise development. In the sixth chapter, I will discuss the issue of capital accumulation strategies. According to their own power, capitalist agricultural producers will employ diverse capital accumulation strategies. They will accumulate capital not only in the field of production, but also in the field of circulation and from the various government agricultural projects. The seventh chapter intends to present how the different actors in P township fight or collude with each other to gain resources such as land, labor, agricultural machinery services, agricultural products, as well as government subsidies and hand-outs.

Chapter 2: Changed Under Unchanged: The Commodification of Farmland

In classic agrarian transition studies, an important aspect is when the land is separated from the peasants and concentrated in the hands of capitalist agricultural producers. The institutional prerequisite for this change is the private ownership of land. By contrast, the farmland in rural China belongs to the collective economic organization, where the peasant households legally own the land contract and management rights. Thus, the separation of land from peasant households seems to have been hindered by the collective land system. In China's agrarian transition, some scholars approve of this argument. Zhang and Donaldson (2008:44) argue that "collective ownership protects agricultural producers - to various degrees from domination, exploitation and dispossession by outside capital ... An army of landless vagabonds has not emerged". Similarly, Huang, Gao and Peng (2012:26-27) emphasize that "China's distinctive household responsibility system, which distributes the use rights of land equally and forbids the buying and selling of land, makes for a basic precondition for the preponderance of small family farms ... the fact that land cannot be freely bought and sold remains a powerful institutional restraint against more land alienation and the complete 'proletarianizing' of family farmers". With their confidences in the protective function of China's collective land system, those scholars allege that the distinctive characteristic of China's agrarian transition is "capitalization/commodification without proletarianization". However, can China's collective land system really function as a safety net for peasant households? Can it really make China's agrarian transition unique from that in western countries?

This chapter mainly includes three sections. The first section argues that the establishment of HRS not only reformed the collective land system, but also

recreated peasant family farming. In the second section, I explore the expansion of commodity relations in rural China and the agricultural sector, and show how the production of peasant households, their daily lives, and their labor have been absorbed into the national market system. In the third section, I will discuss how the state promoted the commodification of farmland without changing the collective land system nominally, thus providing a precondition for changing the agricultural production system itself.

De-Collectivization and the Reestablishment of Peasant Economy

In the name of Chinese peasant's "spontaneity", the reform elite began to decollectivize the agricultural management system at the end of the 1970s. From then on, China's agricultural production has retreated from collective management to peasant family farming (Bramall, 2009:335-339; Pan, Lu & Zhang, 2012:26; Xu, 2014:189). With the promotion of the state, the HRS was finally established nationwide (Unger, 2002; Chen, Zhao & Luo, 2009:50; Pan, Lu & Zhang, 2012:26): at the end of 1983, about 94% of the national production teams had turned to HRS (Bramall, 2009:338), while at the end of 1984, this proportion was as high as 99.96% (Jin, 2003:14). Thus, in the 1984 No. 1 Policy Document, the term of land contract was formally determined by the CPC Central Committee as 15 years, that is, "The First Round of Land Contract". It also noted that the HRS had replaced the commune system as the basic operational contract system in rural China.

With the change of basic operating system, China's rural land system also changed. Before the reform, the land was owned by the collective in a full sense, and the collective had a complete land property right. After the reform, however, the land property right had been divided into two parts: the land being still owned by the collective, but the peasant households as members of the collective could obtain the land contract and management rights, which is the "Separation of Two Rights Relating to Farmland" (*Liangquan fenzhi*). Mainly because the land was still the main means of subsistence for peasant households at that time, it was distributed equally according to the number of family members. Furthermore, in order to ensure fairness, the collective economic organization could redistribute the land among peasant households according to each household's demographics. In this regard, the establishment of the HRS was actually a special movement of averaging the allocation of land in rural China.

Due to this significant change, the implementation of HRS encountered great resistance, the most famous one was the debate of "choosing socialism or the masses" (Du, 2005:117-120,126). With the appearance of "increasing both production and income", the debates came to an end. The total grain output increased from 305 million tons in 1978 to 407 million tons in 1984 (China National Bureau of Statistics, 1985: 255). Meanwhile, the rural per capita net income increased from 133.57 yuan in 1978 to 355.33 yuan in 1984; and the largest source of growth in net income was family income, increasing from 35.79 yuan in 1978 to 285.44 yuan in 1984 (Chinese National Bureau of Rural Society Economic Survey, 1985: 197). With these results, the HRS gained support from the majority of peasant households, which accelerated the reform in going forward (Xu, 2013).

The mainstream opinions attributed the phenomenon of "increasing both production and income" to the de-collectivization and the establishment of HRS (McMillan, Whalley and Zhu, 1989; Lin, 1992). However, some scholars doubted this argument. They suggested that it was the more intensive application of modern farm inputs, mainly chemical fertilizers, as well as favorable weather conditions that accounted for the growth in the output of agriculture (Bramall, 2009:339; Xu, 2014; Gao, 2013). In the interview, a retired township cadre's answer confirms this view:

"After the Reform, the rice yield rose to about 500 kgs per mu. It was mainly due to the extensive use of fertilizer. There are a lot of fertilizers in the market and you can buy whatever you want. In collectivism times, the whole team can only gain 100 kgs fertilizer, while now I use more than 100 kgs fertilizer per mu." (Xie Wu)

The increase in income was mainly due to rising prices of agricultural products. Ash (1988:540) noted that it was mainly because of "the price adjustments instituted during 1979" that peasant household income increased. Gao Mobo (1999:177-178) also pointed out that in 1979 the agricultural products that the state monopoly purchased was reduced from 180 to 62, "not only was the system reduced so that peasants could sell their produce in the market, but prices for different sorts of monopoly procurement rose from 25 per cent to 40 per cent in 1979". Thus, Gao argued that it was the price increase and market liberalization that gave rise to peasant household income increase in general. This argument is also confirmed by national statistic. Taking 1978 as 100, the national agricultural price index jumped to 130.8 in 1980, and later to 166.8 in 1985, especially the grain price index which increased from 140.8 in 1980 to 201.7 in 1985 (China National Bureau of Rural Social and Economic Survey, 1986: 151). Meanwhile, the costs of agricultural products were reduced greatly. The average cost of six grain crops gradually fell from 10.58 yuan per 50 kgs in 1978 to 8.69 yuan per 50 kgs in 1983, while the corresponding purchasing price rose from 11.28 yuan to 14.12 yuan (ibid., 1985:154). Although the average production cost of producing the crop quickly rose to 20.7 yuan per 50 kgs in 1984, the selling price rose much faster and reached 35.54 yuan, thus the peasant household income still increased quickly (China National Bureau of Statistics, 1986: 161). In addition, the status of Chinese agriculture after 1984 also strongly refuted the mainstream explanation. China's total grain output dropped from 407 million tons in 1984 to 379 million tons in 1985, and it was not until 1989 that it got better (China National Bureau of Statistics, 1990: 363).

The status of agricultural production at the time led to a hot debate about the reform of the rural land system. There were three representative points of view, including "replace the collective-owned with state-owned", "replace the collective-owned with private-owned", and "insist on the collective-owned but perfect it" (Jin, 2003:15). While the debate continued, the party-state already made a choice. In 1991, the CPC Central Committee introduced the "Decision on Further Strengthening Agriculture and Rural Work" (*Guanyu jinyibu jiaqiang nongcun he nongye gongzuo de jueding*) (Zhongfa, 1991, No.21). Article 5 in this Decision put forward that:

"The two-tier management system, based on household contractual management and combines centralized operation with decentralized operation, as a basic system of rural collective economic organization, should be stabilized in long-term and constantly enriched and perfected … This two-tier management system has great flexibility on the specific form and content of combination of centralization and decentralization, which ensuring this system to accommodate different levels of productivity, with a wide range of adaptability and vitality. It is a great creation by Chinese peasantry under the leadership of the party, a self-improvement and development of the collective economy. It is by no means an expedient measure to solve the problem of food and clothing. We must insist on this system, and without any hesitation and vacillation".

With the similar logic, the 1993 No.11 Policy Document, entitled "A Number of Policy Measures by the CPC Central Committee and the State Council to Economically Develop the Present Agriculture and Villages" (*Zhonggong zhongyang guowuyuan guanyu nongye he nongcun jingji fazhan de ruogan zhengce cuoshi*) (Zhongfa, 1993. No.11), also noted the assertion put forward in

1991 Decision. Besides, this Document further stipulated that the term of land contract will be extended to 30 years after the First Round of Land Contract expires, which is the so-called "Second Round of Land Contract" and the contract term is usually from 1995 to 2025. Thirdly, the 1993 No.11 Document proposed the principle of "more people but no more land, fewer people but no less land" (*Zengren bu zengdi, jianren bu jiandi*), which directly calls for an end to the redistribution of land among peasant households.

The introduction of these two documents shows that the state actually has selected the land reform path of "insist on the collective-owned but perfect it". The aim of the state was very clear: to adhere to HRS and stabilize it in the long-term. "The core to stabilize the household contract management is to stabilize the land contract relations" (Jiang Zeming, cited from Chen et al., 2008:68). Thus, the subsequent documents and policies repeatedly stressed the object was to stabilize and perfect the rural land contract relations. In 1997, "A Notice on Further Stabilize and Perfect the Rural Land Contract Relations" (Guanyu jinyibu wending he wanshan nongcun tudi chengbao guanxi de tongzhi) (Zhongbanfa,1997. No.16) stressed that "the core of the Party's rural policy is to stabilize the land contract relations". Therefore, this Notice emphasized that: 1) the local governments at all level must follow the principle of "large stability, little adjustment" (Da wending, xiao tiaozheng); 2) strictly regulate the "two-field system" (Liangtian zhi); and 3) the village collective economic organizations must strictly control the proportion of "mobile land" (Jidong di) under 5% of the total land area. In 1998, "Decision of CPC Central Committee on Some Major Issues Concerning Agriculture and Rural Work" (Zhonggong zhongyang guanyu nongye he nongcun gongzuo ruogan zhongda wenti de jueding) (Zhongfa, 1998) also noted that "the key of the stability and integrity two-tier management system is to stabilize and perfect land contract relations". Meanwhile, the 1998 Decision asked that "we must unswervingly implement the policy of extending the land contract for another three decades, and to step up the formulation of laws and regulations to ensure long-term stability of rural land contract relations, entitle long-term and guaranteed land use rights to the rural residents. Some wrongdoings must be resolutely corrected, including shortening the land contract term, taking back the contracted land, keeping too much 'mobile land', increasing contracting fees and so on".

Although the state has repeatedly emphasized it's wish to stabilize land contract relations, the reality was not the case - land reallocation in rural areas was still very common. In 1997, a national survey was carried out in 266 villages. It showed that about 80% of the villages had land readjustment and the frequency was high, in which 33.96% of the villages readjusted land once, 31.6% of the villages two times, 18.8% of the villages three times, 8.49% of the villages four times, and 7.08% of the villages five times. With regard to the policy not allowing land adjustment, about 62.8% of the 266 villages were unfavorable (Wang, 1998). In the same year, research conducted by the Agriculture Committee of Gansu province revealed that about 56% of the village cadres considered that it was not appropriate to carry out the policy of non-adjusting land, and in their villages the land had been readjusted for three or four times since the implementation of the HRS (Wang, 1998: 60). In addition, the academic studies also reported the same situation. Through an enquiry of farmers in eight counties, Kung and Liu discovered that 62% of them preferred to periodically reassign the contract land in response to the changing structure of the family population (Kung and Liu, 1997). Yang and his partners' survey in Shandong province also found that land adjustment was quite common, 89.6% of the 27 villages he looked at had redistributed land nearly 4 times on average. Moreover, the majority of the farmers thought that the land still should be readjusted during the 30 years' contract period (Yang et al., 2001).

Faced with this situation, the state turned to a legal means to stabilize the land contract situation, mainly by prohibiting the village collective economic organizations to adjust land and strengthening the land contract and management rights of peasant households. The Article 14 of 1998 Revision of the "Land Management Law" stipulated that,

"The duration of such contract is 30 years. The party that gives out a contract and the party that undertakes it shall sign a contract in which to stipulate the rights and obligations of both parties … The right of a peasant to operate land under a contract shall be protected by law. Within the duration of the contract for operation of land, any appropriate readjustment of the land between individual contractors shall be made with the agreement of at least two-thirds of the members of the village assembly or of the representatives of villagers and the matter shall be submitted to the township people's government and the agriculture administration department of the people's government at the county level for approval."

The "Law on Land Contract in Rural Areas" introduced in 2002 spared no effort to stabilize rural land contract relations. In the Article 1, this Law already noted its purpose:

"In accordance with the Constitution, this Law is enacted for the purposes of stabilizing and improving the two-tier management system that combines centralized and decentralized management on the basis of household contractual management, granting to the peasants long-term and guaranteed land-use right, safeguarding the legitimate rights and interests of the parties to land contracts in rural areas, and promoting the development of agriculture and rural economy and social stability in the countryside."

For the establishment of the land contract relation, the Law stipulated that "the party giving the contract shall sign a written contract with the contractor" (Article 21). After signing the contract, "Local people's governments at or above the county level shall issue to the contractor the certificate of the right to land contractual management, or the certificate of forestry ownership, etc., and have

them registered, thus confirming the right to land contractual management" (Article 23). Apparently, either signing a contract in writing or issuing a certificate, the purpose was to demonstrate the legal effectiveness of land contract relations. In addition, the Law stipulated that "the State protects the legitimate rights and interests of the owners of the collective land and the right of the contractors to land contractual management, which no organizations and individuals may infringe upon"(Article 9); " After a contract goes into effect, the party giving out the contract may neither modify nor revoke the contract due to the change of the representative for the party giving out the contract or the responsible person concerned, or due to the split or merger of the collective economic organization" (Article 24); "No State organs or their staff members may, take advantage of their positions and powers, interfere with the contracting of rural land or modify or revoke contracts"(Article 25); and during the term of contract, the party giving out the contract may not take back (Article 26), readjust (Article 27) the contracted land, and also "may not unilaterally revoke the contract"(Article 35).

All in all, from the late 1970s to the late 1990s (early 2000s), the main objective of the state's rural policies was to establish, consolidate and perfect the HRS, and its core was to stabilize land contract relations and limit land adjustments. As a result, the right to readjust the land owned by the village collective economic organizations in the First Round of Land Contract Period was denied in the Second Round of Land Contract Period. During this period, the main feature of China's collective land system is the "Separation of Two Rights Relating to Farmland" – land ownership belongs to collective economic organizations, while land contract and management right is owned by peasant households. In general, the state's policies intended to set restrictions on the village collective's land ownership manipulation, and to stabilize and strengthen peasant household's land contract and management rights (Zhang, 2012:131; He, 2010:82-151). Under the influence of this series of laws and policies, the village collective's land ownership position has existed in name only, while the peasant household land contract and

management right has been constantly reinforced. China's rural land system, nominally, is a collective land system, but in fact it had already become a smallholder land management system, just like "land to the tiller", in which peasant family farming is the core.

The Expansion of Commodification

In the view of the reform elite, the establishment of peasant family farming obviously was not enough to promote the development of rural productivity. Du Runsheng (1985:271-272) noted that the development of rural productivity not only needed state investment, but also needed the commodity economy, which is because "commodity production can generate market stimulation, then this stimulation can become the dynamic to develop production, and can form an economic mechanism, which can develop, adjust, balance and correct spontaneously". It is this worship of the spontaneous power of the market that the reform elite actively promoted with the establishment of commodity relations in rural China's agricultural sector. From 1982 to 1986, the state continuously reformed the commodity circulation system and facilitated the rural and agricultural commercialization in five No.1 Policy Document (Du, 2005:135-146). Apparently, the state intended to transform the Chinese peasantry into a group of active commodity producers and integrate the countryside and agriculture into the national market. Under the impetus of state policies, commodity relations rapidly penetrated the countryside and agriculture.

Increasing Commodification of Rural Life

The first manifestation of the explosion of commodity relations is the increasing demand for money in the daily life of peasant households. Kautsky (1988[1899]: 15) said that: "the more this process forges ahead … the greater the peasant's

need for money – not just for supplementary, non-essential items, but for necessities, the indispensable elements of life. Peasant economic existence, and with it peasant life in general, becomes impossible without money". In fact, the increasing demand for money is the first step to promote peasant differentiation. Take healthcare and education as two examples.

In April 2016, the third time I entered P township, one of my key interviewee Liu Min had an acute cholecystitis. Liu was quickly sent to a municipal hospital to have surgery by his family. Liu told me, the entire treatment cost him about 65,000 yuan, which amounts to half of his family's yearly income. Due to having a better understanding of this family, I estimate this treatment may take about 1/3 of his annual income. But whether 1/2 or 1/3, this sudden illness indeed cost this family a large sum of money. Fortunately, Liu's family is a relatively wealthy family in his village. However, if a serious illness could take out a third of the annual income from such a wealthy family, what about the other families in relatively poor economic conditions? The answer is very disturbing.

Clearly, the health care costs have become one of the major expenditures in Chinese peasant households after the state withdrew from this field. According to some scholars' estimation, China's total healthcare cost has constantly risen from 1978 to 2000, and the proportion of government, social and personal spending in medical costs has changed from 32%, 48% and 20% in 1978 to 16%, 60% and 24% in 2000 respectively (Li, Chen and Powers, 2012: 640-641). Thus, the personal spending part in health care cost not only rose in relative terms, but also in absolute quantity. Health care has become a heavy burden for many Chinese peasant households. Another national survey report also demonstrates this situation. In 2005, the State Council Development Research Center showed that a serious illness could cost Chinese peasant households about 7,051 yuan on average. With per capita income of 2,000 yuan at that time, a serious illness may cost a family of three more than a whole year's income (Han & Rodin, 2005: 16). Therefore, a

reality is: medical cost has become a heavy burden for the Chinese peasant households; it is very possible for ordinary peasant households to get into a debt trouble when there is a sudden serious illness in the family.

Another great demand for cash is education. "The commercialization of education by schools has resulted in significant increases in tuition and fees" (Zhang & Soukup, 2016:14). The data from the Chinese Household Income Project 2002 revealed that the per capita total expenditures (tuition and fees) for a primary student, junior student, senior student, technical student and college student were respectively 427 yuan, 890 yuan, 2,547 yuan, 3,502 yuan and 6, 845 yuan per annum (Zhang & Soukup, 2016:22), while the per capita net income of rural residents was 2475.6 yuan in 2002 (China National Bureau of Rural Social and Economic Survey, 2013:267). Therefore, the education fee has become another heavy burden for Chinese peasant households. It is also because of the increased burden of education that the idea of "Knowledge is Useless" became popular in rural areas, and the lower the household income, the more likely that parents accept this idea (Chen, 2013: 115). As a result, many rural children have to drop out of school early, and have no choice but to go out as the migrant workers.

Clearly, rural China has become deeply involved in commodity relations, and the demand for cash in peasant households has gradually increased, which is also confirmed by national statistics (Table 2.1). Within the total consumption expenditure of Chinese peasant households, the self-sufficiency expenditures accounted for 50.9%, while cash expenditure accounted for 49.1% in 1980. From then on, the proportion of the self-sufficiency expenditures continually shrank each year, while the proportion of cash expenditures increased year by year. From 1985 to 2010, the proportion of cash expenditure had increased from 58.5% to 88.1%; by 2014. In the same period the proportion of self-sufficiency expenditures dropped from 41.5% to 11.9%; with a slight recovery in 2014, but still accounting for only 19.9% of total household expenditures.

Year	1980	1985	1990	1995	2000	2005	2010	2014
Total income	191.3	397.6	686.3	1577.7	2553.4	3254.9	5919	10488.9
Total expenditure	162.2	317.4	584.6	1310.4	1670.1	2555.4	4381.8	8382.6
Total cash expenditure	79.6	185.6	374.7	859.4	1284.7	2134.6	3859.3	6716.7
%	49.1	58.5	64.1	65.6	76.9	83.5	88.1	80.1
Total self-sufficiency								
expenditure	82.6	131.8	209.9	450.9	385.4	420.8	522.5	1665.9
%	50.9	41.5	35.9	34.4	23.1	16.5	11.9	19.9

Table 2.1 The cash expenditure and self-sufficiency expenditure in peasant households, 1980-2014 (yuan / person)

Data source: The data of "total income" comes from Zhongguo nongcun tongji nianjian (China rural statistical yearbook), 2013: 267; 2015: 283. The other data come from Zhongguo nongcun tongji nianjian (China rural statistical yearbook), 1989:227; 2006:275-276; 2012:275-276; 2015:284-285.

(yuan/person)								
Year	1980	1985	1990	1995	2000	2005	2010	2014
	31.3	76.5	155.9	353.2	464.3	770.7	1313.2	2301.3
Food	16.4%	19.2%	22.7%	22.4%	18.2%	23.7%	22.2%	21.9%
	19.6	30.7	44	88.7	95.2	147.9	263.4	509.7
Clothing	10.3%	7.7%	6.4%	5.6%	3.7%	4.5%	4.5%	4.9%
	11.4	38.4	81.2	147.9	231.1	342.3	801.4	758.5
Residence	5.9%	9.6%	11.8%	9.4%	9.0%	10.5%	13.5%	7.2%
Household	17.5	39.8	30.7	68.1	74.4	110.9	233.5	500.1
articles and	9.2%	10.0%	4.5%	4.3%	2.9%	3.4%	3.9%	4.8%
services								
Communication	_*	-	8.4	33.7	93.1	245	461.1	1012.5
& Transportation	-	-	1.2%	2.1%	3.6%	7.5%	7.8%	9.7%
Education &	-	-	31.33	102.4	186.7	295.5	366.7	859.2
Cultural			4.6%	6.5%	7.3%	9.1%	6.2%	8.2%
entertainment	-	-						
	-	-	19	42.5	87.6	168.1	326	614.9
Medical care	-	-	2.8%	2.7%	3.4%	5.2%	5.5%	5.9%
	-	-	4.3	23.1	52.5	54.1	94	160.5
Others	-	-	0.6%	1.5%	2.1%	1.7%	1.6%	1.5%
Total cash	79.6	185.6	374.7	859.4	1284.7	2134.6	3859.3	6716.7
expenditures	41.6%	46.7%	54.6%	54.5%	50.3%	65.6%	65.2%	64.0%
Total income	191.3	397.6	686.3	1577.7	2553.4	3254.9	5919	10488.9

Table 2.1-1 The composition of cash expenditure in peasant 1980-2014

Data source: Zhongguo nongcun tongji nianjian (China rural statistical yearbook), 1989:227; 2006:275-276; 2012:275-276; 2015:284-285. *: No data

1995 Year 1980 1985 1990 2000 2005 2010 2014 187.9 Food 69.1 106.9 415 356.3 391.5 487.5 512.7 Clothing 0.4 0.6 1.4 1.1 0.8 0.6 0.6 0.7 Residence 1.5 0.8 20.2 34.4 27.28 27.8 33.8 1004.2 Household articles 11.7 23.5 0.2 0.4 1.08 0.5 6.4 0.6 and services _* 0** Communication& 0.01 0.03 0 0 0.1 Transportation 0 0 Education & Cultural 0.05 0.04 0 0.3 _ _ entertainment Medical care 0.04 0.01 0 0 0 139 0.09 0 0.38 0 Others 0 2.5 -Total cash expenditures 79.6 185.6 374.7 859.4 1284.7 2134.6 3859.3 6716.7

Table 2.1-2 The composition of self-sufficiency expenditure in peasant households living consumption, 1980-2014 (yuan/person)

Data source: *Zhongguo nongcun tongji nianjian* (China rural statistical yearbook), 1989:227; 2006:275-276; 2012:275-276; 2015:284-285. *: No data; **: No expenditure.

Turning to the specific composition of cash expenditures (Table 2.1-1), the proportion of per capita food consumption cash expenditure accounting for a households' per capita income is still the largest, which has been maintained at around 20% since 1985. Under this stability, however, we should perceive the changing of the food consumption structure of rural residents. Philip Huang argues that China has experienced "a food consumption revolution" – "The Chinese people, clearly, have changed rapidly from a diet of mainly staple grains to greater and greater consumption of meats-fish-poultry and milk and eggs (and higher-grade vegetables), with a concomitant decline in the consumption of grains" (Huang, 2016:10). To be specific, the consumption of "food crops" declined from 240 kg per person in 1980 down to 130 kg in 2010, while for the rural household, the consumption of meat-poultry-fish increased from 11 kg to 25 kg (ibid., 9-12). Thus, the per capita food consumption cash expenditure has definitely increased. Second, the proportion of transportation and communication costs have risen

sharply, and had already become the second largest expenditure item of peasant households by 2014. This is largely attributed to the large-scale rural-urban migration. Besides, the expenditure on accommodation, medical care and education have all experienced an upward tendency. Although the proportion spent on clothing, household articles and services has dropped, the absolute value still increased greatly.

All in all, the general trend shows that the daily life of Chinese peasant households has increasingly depended on the commodity market for cash. Inevitably, rural life has been commercialized. That is, the daily life of Chinese peasant households has been constantly absorbed into the national market. As a result, the peasant households cannot live function outside of the market.

Commodification of Production

"These rising demands for cash to pay for what used to be communally provided services are driving many to engage with the market" (Webber, 2008: 310). While "the only method by which peasants could acquire money was to turn their products into commodities, to take them to market and sell them" (Kautsky,1988[1899]:16). So, agricultural production has begun to experience the commodification.

Academic studies have shown that the overall rate of commercialization of China's major agricultural products has increased from 34.3% in 1985 to 65.6% in 2006 (Cao & Wang, 2009, cited in Zhang, 2016:182). While "the commercialization rate … for gains has grown from about 50 per cent to 85 per cent over the past decade, while that for vegetables, cotton and fruits (e.g. apples) has approached 100 per cent " (Yan & Chen, 2015:371). Although there is no direct related data for F County, we can estimate the degree of commercialization of agricultural

products from the changing proportion of cultivated area (Table 2.2). From 1978 to 2005, the proportion of the cultivated area of grain crops has continuously decreased, especially in 2000 the grain crop proportion fell to less than 50%. On the other hand, the proportion of cash crops has increased year by year. From these ups and downs, the general tendency of the commercialization of agricultural production in F County has been largely uncovered.

Year	Total area	Grain	crops	Cash crops		
	(mu)	area (mu)	%	area (mu)	%	
1978	616,590	519,300	84.2	97,290	15.8	
1985	672,945	469,695	69.8	203,250	30.2	
1987	705,726	459,731	65.1	245,995	34.8	
1990	705,639	447,702	63.4	257,937	36.6	
1995	709,684	371,442	52.3	338,242	47.7	
2000	641,044	308,132	48.1	332,915	51.9	
2005	599,641	268,287	44.7	331,354	55.3	

 Table 2.2 Total cultivated area and percentage of grain crops and cash crops

 in F County

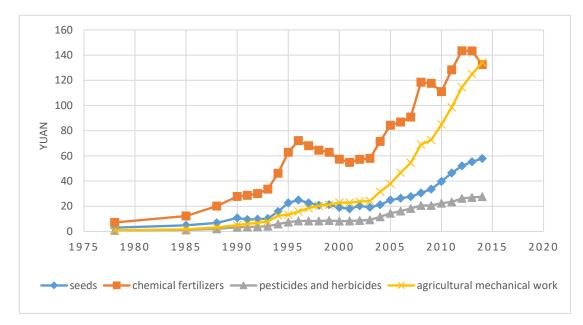
Data source: Fanxian difangzhi bianzuan weiyuanhui (The Compiled Committee of Chorography of F County), 2009:311

With the increasing commercialization of agricultural products, it indicates that the means of production are also rising. After engagement with the commodity economy, the peasants (as commodity producers) are bound to want to maximize their profits guided by the logic of the market. In general, the peasants can be compelled to employ a quantity-driven strategy to lessen the impact of market price fluctuation and obtain a stable income (Zhang, 2016). This market strategy, however, is restricted to the limited area of land. Thus, the extensive application of agricultural chemicals tends to be seen as the only means to raise production output and increase incomes (Trappel, 2016:86). Take F County as an example, the cultivated area of green manure, mainly clover, has declined year by year after 1978. From 1978 to 1986, the green manure planting area decreased by about 50%

(The Compiled Committee of Chorography of F County,1993:174). In 1987, the green manure planting area was 54,687 mu, but only 12,664 mu was left by 2006, declining by about 81% (The Compiled Committee of Chorography of F County, 2009:326). With the declining of the planting area of organic green manure, the used amount of chemical fertilizer has increased year by year. The total amount of chemical fertilizer applied in F County was about 7,973 tons in 1989, then increased to 13,781 tons in 2005 (ibid., 326). It is the same story for pesticides. From 1987 to 1996, the per year usage of pesticides in F County was between 40-60 tons, after 1997, however, it increased to 80-120 tons (ibid., 325). Moreover, the peasants of P township have replaced the conventional rice seeds, which can be self-reproduced by peasant households, with the hybrid rice seeds, which cannot be self-reproduced and need to be purchased every year. No doubt, Chinese agriculture has become a capital-intensive business with the increase usage of Chinese peasant households.

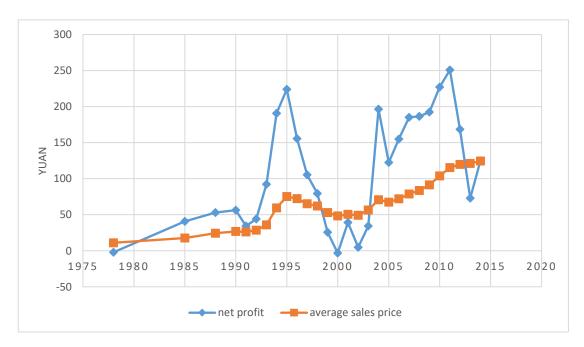
With the commercialization of the agricultural inputs and outputs, China's agriculture has become a commodity economy (Bian, 1998:87), which has already been integrated into the national market. China's small peasants are no longer a subsistence only group, but rather have transformed into market-orientated commodity producers. As commodity producers, they will be affected by "the silent compulsion of economic relations" (Marx, 1990: 899) – on the one hand, withstanding the pressure from the upstream agricultural material market, on the other, facing the unknown risks arising from the agricultural market. "If Chinese agriculture was immersed in the fruit of the marketization at the first half of the 1980s, then the shock brought by the market regulation has become evident day by day in the second half of the 1980s … with the maturation of the market mechanism in Chinese agriculture, farmers face huge risks triggered by the shock" (Bian, 1998:96).

Figure 2.1 Some material production costs of growing the three main grain crops in China,1978-2014 (yuan/mu)



Data source: *Quanguo nongchanpin chengben shouyi ziliao huibian* (The Compilation of National Agricultural Product Cost and Profits), 2007:6-8; 2013:4; 2015:4.

Figure 2.2 The average sales price and net profit of three grain crops in China, 1978-2014(yuan/50 kg; yuan/mu)



Data source: *Quanguo nongchanpin chengben shouyi ziliao huibian* (The Compilation of National Agricultural Product Cost and Profits), 2007:3-5; 2013:3; 2015:3.

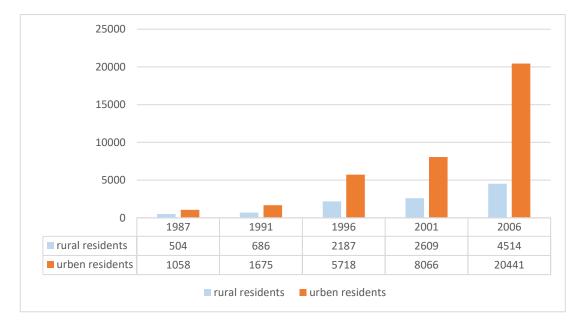
Take three staple food grains, rice, wheat and maize as examples. According to the data from the "The Compilation of National Agricultural Product Cost and Profits" (*Quanguo nongchanpin chengben shouyi huibian*) (Figure 2.1), the average material production costs of the three staple food grains has increased from 58 yuan per mu in 1978 to 1,068 yuan per mu in 2014. Among them, the cost of fertilizer and mechanical work has increased the fastest: the former one increased from 7 yuan/mu in 1978 to 132 yuan/mu in 2014, while the latter one increased from less than 1 yuan/mu to 134 yuan/mu in the same period. Although there is no consideration of inflation and other factors, the rapid increase in the cost of agricultural production is an indisputable fact.

Compared to the rapid rise in production costs, the growth of the average price of the three staple food grains is slow, from 11yuan/50kgs in 1978 to 75yuan/50kgs in 1995, and then increased slowly to 124 yuan/50kgs (Figure 2.2). The net profit per mu is a much clearer visual representation of the strong market impact. In general, the farmers' income goes up and down like a roller-coaster ride. The net profit plummeted from 224 yuan per mu in 1995 to minus 3 yuan per mu in 2000 - farming was unprofitable. Then with the state's regulation (mainly the abolition of agricultural tax and the increasing grain price), the net profit began to rise and reached 197 yuan per mu in 2004. The suffering of farmers can also be confirmed from some relevant surveys. A survey of Jilin province in 1999, carried out by CASS Rural Development Institute and the National Bureau of Rural Socioeconomic Survey Corps (2000: 202-203), showed that the net income per mu of maize was only 10 yuan. The report noted that "the declining of agricultural production profit is mainly due to the continuous falling of the market price of agricultural products". Similarly, in Anhui province, the net profit per mu of rice was still less than 100 yuan even in the case of good weather (Li & Xu, 2006:6).

Therefore, the daily life of Chinese peasant households and agricultural production

have both been incorporated into the national market with the expansion of commodification, leaving them with the inability to get rid of the market. As Bernstein (2010:103) argues that "once farming households are integrated into capitalist commodify relations, they are subject to the dynamics and compulsions of commodification, which are internalized in their relations and practices".

Figure 2.3 Per capita income of urban and rural residents within F County, 1987-2006 (yuan)



Data source: *Fanxian difangzhi bianzuan weiyuanhui* (The Compiled Committee of Chorography of F County), 2009:91-92.

The peasant households had expected to gain enough money to maintain their subsistence by the commercial management of agriculture. The reality, however, is that spontaneous market forces have made agricultural incomes unstable. In this situation, the income gap between rural residents and urban residents also expanded dramatically. In F County (Figure 2.3), the absolute value of the per capita income gap between urban and rural residents soared from 554 yuan in 1987 to 5,457 yuan in 2001, and 15,927 yuan in 2006.

Devaluation of Farmland and the Rise of "Middle Peasants"

Migrant Work and the Devaluation of Farmland

With the growing income gap between urban and rural areas and unprofitable agricultural operations, the major labor force (mainly male laborers) in peasant households have to give up farming, and have no choice but to go out as migrant workers to earn wages to meet the rising demand for money for living expenses and agricultural production (Guo, 2002; Croll and Huang, 1997: 145; Seeborg et al., 2000: 45; Webber, 2008: 307). Local statistics show that there are more and more peasants going out as peasant-workers in F County. There were 63,213 laborers in 2002, 64,326 in 2003, 64,474 in 2004, and 64,820 in 2005, in which the proportion of "perennial migrant laborers", mainly young and middle-aged people, increased much faster, from 38,234 in 2003, to 49,772 in 2004, and to 50,447 in 2005 (The Compiled Committee of Chorography of F County, 2009:257; 661). There were also many laborers going out as migrant workers in P township. In a local villager's words, it is "the incredibly poor of the household that are forced you to go outside to find a job" (Wang Weiping). The numbers of migrant workers in P township also increased year by year, from 6,773 in 2006 (Feng, 2015a:26) to 11,250 in 2014. As mentioned above, the daily life and agricultural production of Chinese peasant households have been incorporated into the national market. Now, the peasants themselves as laborers have been thrown into the market. They left the countryside and have be exploited as labor force in the coastal cities.

Along with the rise of the rural-urban migration stream, the income structure of the peasant households has begun to change. Figure 2.4 reveals that, from 1985 to 2014, the proportion of wage income in China's rural per capita net income was

continuously rising, while the proportion of household operational income was constantly declining. In fact, the proportion of wage income (45.3%) has already passed the household operational income (42.6%) (China Net, 2014). From the investigation, I find that this change has already occurred. As long as the main labor force migrates out for work, then the wage income will certainly be more than the agricultural income. In this sense, for these peasant households mainly relying on wage income to maintain a living, the agricultural output is just a food supplement. Thus, it's not hard to imagine why some households even directly give up their agricultural production and in turn buy food with wages. It is in this sense that the once "subsistence plus" model is turned on its head (Bernstein, 2010:184). In fact, these peasant households have already adopted a "wages plus" model to maintain their subsistence. Furthermore, I argue that more and more peasant households will have to adopt the "wage plus" model, with the deepening commercialization of rural areas and agricultural production. The extent to which peasant households abandon agricultural production, however, will depend on the extent to which they are involved in commodity relations.

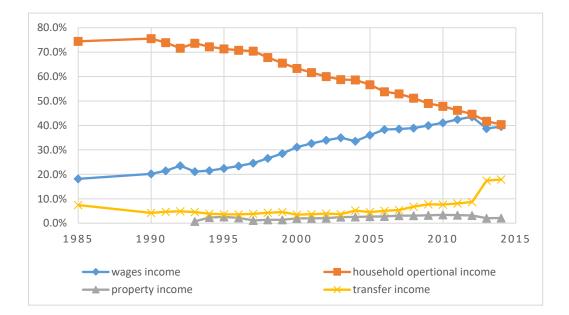


Figure 2.4 The composition of rural residents' per capita income 1985-2014

Data source: Zhongguo nongcun tongji nianjian (China Rural Statistical Yearbook), 2013:267; 2015:283.

Due to the difficulty of agricultural operations, and declining agricultural incomes, the value of land has begun to decline (Verdery, 2003: 223) – the land is no longer a "Field of Hope". The devaluation of land is mainly represented in two ways: the economic value and the social/cultural value.

First, at the beginning of the reform, agricultural production was still a profitable business. After 1990, however, farming had become a burden to the peasant households because of the unprofitability of agricultural production and the heavy agricultural tax. With the decline in the economic value of land, a direct result was large-scale land abandonment. An elderly man told me, "the deepest of the land abandonment happened in the late 1980s and early 1990s, when you still needed to pay agricultural tax, sell the state procured grain (*Dinggou liang*), and you also needed to bear the toil of farming, but the income was poor. Thus, who would like to engage in agriculture?" In April 2000, a land abandonment survey was carried out in F County. The survey showed that there was about 15,649 mu of farmland abandoned for various reasons, amounting to 5.2% of the total contracted land area in F County. About 7,395 mu of farmland was abandoned after rural-urban migration, accounting for 47% of the total area of abandoned farmland. This was the main reason for land abandonment (The Compiled Committee of Chorography of F County,2009:306).

Another outcome was the rise of spontaneous land transfers among peasant households. In 2005, Wang Weiping, in A village, went to a construction site in Jiangsu province as a migrant worker together with her husband. They left the 4 mu of contracted land to their father to cultivate. The reason to go out was very simple – "the family cannot maintain a subsistence with these 4 mu of contracted farmland". In order to take care of their little son, Wang had to come back to the home village in 2013. Instead of cultivating the contract land by herself, she chose to transfer it to the village group leader at a price of 400 jin of grain per year per

mu. Wang explained: "I am alone at home; the kid's father works outside. I don't have a tractor. If I plan to cultivate the land, I still need to buy the agricultural machine service, and manage the farm by myself. I cannot do all this work by myself. But it is not a good deal if my husband comes back to give me a help. So, it might be good to transfer the land to other people". No doubt, doing farming at home brings less income than work outside. Wang's husband earns about 200 yuan per day, and about 6,000 yuan in one month, which is equal to the annual income from the 4 mu of farmland. Since it is not worth doing farming by themselves, land transfer has become the best choice for Wang.

Secondly, with the decline in the economic, social and cultural significance of farming, land began to lose its value. If for the older generation, the land is still their roots, then for the younger generation, they have no such spiritual relations with the land. "Farming has no value' becomes common sense to the peasantworkers ... Not knowing the number of mu of their land and the income of their rural family was a frequent finding among the migrant workers in their late teens and mid-twenties, both male and female" (Pun, 2016:79-80). Similarly, "Who's going to farm the land in the young generation?" "We are the last generation to farm the land" has become common sense to the villagers in P township. To some extent, when a young man engages in the agriculture, the villagers say "he has no future". If the first generation of peasant-workers left the land mainly because farming is unprofitable, then now, the young generation in the countryside choose to go away from the land because there is no future. If the older generation still has feelings for the land, then the relationship between the young rural residents with the land is already distant. On the one hand, some young people want to leave the land on their own initiative, on the other they are forced to leave by their parents. It is also in this sense that there is a self-driven new form of "enclosure" of land (Lu & Pan, 2014: 11-15; Pan, 2016: 75-80), that is, be driven by the young generation and their parents, not by the force beyond the countryside.

Due to the developmental emphasis of the state being placed in urban areas, rural areas have become a forgotten land, getting into a "no way out" plight, and a place where young people want to run away from (Yan, 2005). After graduating from the junior high school, there are generally two roads in front of the youngster in P township: one is to go to the high school, then to the university with full support from the family; the other one is to go out directly as migrant workers with the help of acquaintances. These two roads are different in quality, but have one thing in common: they leave the countryside and avoid the land.

The neighbor of Fu's family is a case in point. Uncle Fu's eldest son dropped out of junior high school and went out early as a migrant worker, and now is a middle manager in a factory in Sichuan province. The second son attended the high school and university with the support from his parents, and has got a good job at a foreign trade company in Shanghai. The old couple are very satisfied by the eldest son, while the second son who is away from the countryside and who has got rid of the identity of the peasant, they are full of pride. Obviously, the Fu brothers will not come back to the land.

Even for those young people who cannot stay at cities, they come back to the countryside, but do not return to the land in P township. The second son of Wang's family in the township went back to P township because he could not find a job in the urban areas after graduating from the university. Although he returned to the countryside, little Wang did not engage in agricultural production. When I asked him why, he answered: "I don't have the technique, and also I don't have the heart to do farming". Finally, little Wang opened a small inn, as well as a pharmacy and a snack bar, near the P township bridge. When I chatted with him sometimes, he always sighed, "I cannot see my future", "I want to leave, but now I can't". You can hear disappointment in his voice.

The Rise of "Middle Peasants"

The peasant differentiation, actually the de-agrarianization, has been brought about by the large-scale rural-urban migration. Many peasants left the agricultural sector and became peasant-workers. Preferring to abandon their farmland, they were willing to transfer it to their neighbors, relatives or friends, which can bring them some form of compensation – this spontaneous land transfer has become an important prerequisite for the commercialization of land (Trappel, 2016: 96).

Clearly, the spontaneous land circulation among peasant households had already risen in the absence of state intervention. A survey showed that there were about 80,000 hectares of land transferred by this spontaneous way in 2003, accounting for 42% of the total area of transferred land, which was the most common mode of land transfer in Anhui province (Xiao, 2003, cited from Sheng, Wang & Wu, 2005: 487). As a result, a group of "middle peasants" has been created by this spontaneous land circulation. Middle peasants are for example: a middle-aged couple, cultivating 20-30 mu of land transferred from peasant households, and running sidelines, with an annual income about 20,000-30,000 yuan, making a complete family life (He, 2013:34). Middle peasants are a group of moderate-scale agricultural operators emerging spontaneously from the reservoir of small peasants.

Before the agricultural tax was abolished in 2005, middle peasants generally didn't need to pay the land rent, but had to pay the agricultural tax on the land. After 2005, middle peasants needed to spend some money to acquire the use of land, but which was relatively low – no more than 100 jin of grain per mu per year. The spontaneous land circulation occurred more among relatives, neighbors and friends, and mostly in the form of oral agreement (He, 2013).

Around 2000, this spontaneous land circulation was very common in P township. However, due to most of the land being transferred under official methods, I have not been able to get first-hand information on the spontaneous land circulation. Fortunately, the fieldwork launched by Feng Xiao in P township in 2013 has provided me with some valuable materials. K village is located in the north part of P township, and carried out land consolidation in 2014. Similar to other villages, the majority of peasant households had given up the agricultural production, after gaining a source of income from migrant work. From the Table 2.3, we can see that the proportion of peasant households engaged in agriculture production in all nine village groups is no more than 50%, of which almost all are middle peasants.

Villager's	Total number of	Total number of	%	The number of
group	households	farming households		middle peasants
А	36	11	31	5
В	29	11	38	7
С	38	17	45	8
D	43	16	37	8
Е	48	12	25	4
F	41	12	29	8
G	51	17	33	5
Н	48	9	19	4
Ι	50	9	18	6

Table 2.3 The statistics of the farming peasant households in K village, 2013

Data source: Feng, 2013a:45

Taking a closer look at F village group in Table 2.4, we can see that F it is composed of 41 households, and the total land area is 181.19 mu. There are 12 farming households, of which 10 households had acquired some land. The total land area cultivated by these 10 households is 225 mu, more than the total land area of F village group, which indicates that these households not only acquired land from their home group, but also from other groups.

Apparently, a group of middle peasants in P township has been created by the spontaneous land circulation among peasant households. I argue that the rise of

middle peasants is clearly an outcome of peasant differentiation. These agricultural producers have risen based on the out of the agricultural management of their neighbors, relatives and friends. However, it should be noted that the agricultural production of middle peasants, to a large extent, is still no different than the production mode of peasant family farming.

No.	Age	Contracted land (mu)	Cultivated land (mu)	From whom?
1	60	6.19	25	brother and sister
2	61	6.11	20	son
3	58	3.74	30	brother
4	62	2.5	20	brother
5	50	7.47	7.47	/
6	47	4.97	25	brother
7	78	7.08	7.08	/
8	70	5.29	15	son
9	50	6.24	30	brother and cousin
10	70	2.07	15	son
11	63	3.36	20	son and son in law
12	57	6.48	25	son and brother

Table 2.4 Land acquisition information of the 12 farming households in Fvillage group in K village, 2013

Data source: Feng,2013; my own interview

In pro-peasant advocates' view, the rise of "middle peasants" represents the vitality of the peasant economy. I argue, however, that the rise of "middle peasants" is not a story of the surprising vitality of the peasant economy, but its death, as "the silent compulsion of economic relations" is overwhelming peasant household agricultural businesses, forcing them to sell their labor as migrant workers and to devalue the meaning of land. Similarly, when Marx (1990:928) probed the historical tendency of capitalist accumulation, he argued that "at a certain stage of development, it (the private property based on the labor of its owner, that is, the peasant economy) brings into the world the material means of its own destruction". Spontaneous land circulation and the rise of the "middle peasant" are a stage in the death of the peasantry.

Up to this point, I have mainly discussed the following issues: firstly, due to the expansion of commodity relations, the daily life of peasant households has been inseparable from money, commodities and market. That is, their subsistence has been commercialized. Secondly, peasant households have had to engage in agricultural commodity production in order to meet the increasing demand for money. However, "the silent compulsion of economic relations" has caused most of the peasant households to fail. Therefore, thirdly, the peasant households have abandoned agricultural production, and to sell their labor in urban areas to earn a salary to maintain family simple reproduction. In this process, the Chinese peasant household lifestyle has changed from the "subsistence plus" model to the "wages plus" model. Following this change is the devaluation of land not only in economic, but also in social and cultural terms. In this case, fourthly, the land transfer among peasant households has emerged spontaneously, which has created a group of "middle peasants". The rising of "middle peasants" is a representation of the collapse of the peasant economy.

In fact, it is a trilogy that Chinese peasant household daily life, agricultural production and their labor are gradually incorporated into the national market, that is, capitalized. Even so, China's agricultural production itself has not been capitalized, that is, the peasant family farming still holds a dominant position in Chinese agricultural production at that time. Then, the agricultural production mode itself has become the next target of capital and state.

Reform of the Rural Land System: A Precondition of the Agrarian Transition

Combing through the policy documents, this section mainly intends to explore the reform of the rural land system. It mainly argues that while maintaining the collective land system nominally, the state stealthily facilitates the commercialization of farmland through land transfer, which provides an important prerequisite for the capitalization of agricultural production itself.

The Frustration of Peasant Economy

When promoting the establishment of Household Responsible System, the top designers imagined an idealized blueprint, that is, the HRS was seen as a kind of cooperative economy which combined the centralized operation with appropriate decentralized operations (Du, 1985:120-122). This is known as "unified and separated combined, two-tier management". The so-called "unified" is that the village collective economic organization solves some public affairs, which cannot be solved by single peasant households alone, e.g. irrigation and water conservancy provision, large agricultural machinery, plant protection and other services. The "separated" means the family management of agricultural production. The designers expected to stimulate peasants' enthusiasm for production through the "separated", while providing the unified services for dispersed family management, as well as to organize the peasants, by the term "unified". The reality of development, however, has not progressed as expected. In fact, the result of the establishment of HRS is "separated' has been strengthened, while 'unified' has not been established" (Tong & Wen, 2009:10). Under this situation, the drawbacks of the peasant economy have begun to emerge.

First, the degradation of agricultural infrastructure (Lu, 2002:5; Jin,2007). Chen Xiwen and his colleagues (2008:188) admitted that after de-collectivization, "China's water conservancy construction investment has not kept pace; management has not been perfect; the vast majority of farmland water conservancy

construction has aged and badly damaged due to failure to timely renovate, with an average annual reduction of the effective irrigation area of 3 million mu, equivalent to an annual reduction of 10 large-scale irrigation areas of 300,000 mu … the proportion of nationwide small-scale irrigation and canal building in good condition is less than 50%". As well, He Xuefeng (2013:128), argues that "after de-collectivization, the farmland water conservancy construction investment has long time be absent. A considerable proportion of the current water conservancy facilities in the countryside are still the heritage of the peoples' commune period, which was already aged and even badly damaged". A report of P township in 2011 also demonstrated the degradation of the local agricultural infrastructure:

"Drainage ditches have not been repaired for many years, while the existing ones are chocked seriously … which caused reduced efficiency and cannot meet the expected standards; there is severe waterlogging in the low-lying polder areas due to the lack of necessary drainage system; the irrigation facilities are inadequate and some farmland even without the irrigation canal system; the farm roads are too narrow and unreasonable distribution to operate the agricultural machines; the early constructed ditches were destroyed due to peasants' less protection awareness to the water conservancy facilities after the establishment of HRS."

Obviously, China's agricultural infrastructure has already experienced a significant degradation after the de-collectivization, which inevitably affected the further development of agricultural production (Bramall, 2009: 341-342; Hinton, 2006: 194). Jin Baoyu (2007), a scholar from Taiwan, precisely termed this situation as "The Great Leap Backward of Chinese Agriculture".

Second, scattered family management lead to a high degree of fragmentation of farmland and further also caused a great waste of land resources. William Hinton described this situation vividly:

This was not "postage stamp" land such as used to exist before land reform, but "ribbon land," "spaghetti land," "noodle land"—strips so narrow that often not even the right wheel of a cart could travel down one man's land without the left wheel pressing down on the land of another. (Hinton, 1990: 16)

The top designers have already attributed the origin of the problem of land fragmentation to the peasant economy. In fact, as early as 1983, Du Runsheng (1985:156) already pointed out this drawback inherent in the peasant economy – "Under current production conditions, the contracted land was too fragmented, which has caused inconvenience to farming". In 1999, a national survey showed that the rural household had 0.53 hectares (7.95 mu) land on average, but the land was divided into 6.06 plots, that is, every piece of land was, on average, only about 1.3 mu (National Rural Fixed Observation Office, 2001, quoted in Tan et al., 2006: 274-275). It is similar in P township. One of my interviewees told me, his family owns 5 mu of farmland, but it was located in 9 different places. The fragmentation of land will in turn affect farm infrastructure construction (Hu, 1997: 178). Even when the village collective economic organizations are willing to carry out the construction of agricultural infrastructure, they have to negotiate with numerous peasant households on the one hand, while, on the other hand, farmland infrastructure construction is very likely to be halted as long as one of the peasant household's objects. In addition, the field boundary of each households takes up a lot of arable land. Kautsky (1988 [1899]:96) already claimed clearly that "the smaller the plot, the greater the length of its boundaries in relation to its surface area". Some scholars have estimated that the arable land occupied by the field boundaries took up about 3-10% of the total cultivated land area in China (Zhang & Huang, 1997, quoted in Tan et al., 2003:24), which brought the decline of grain production. A study reveals that if the problem of land fragmentation had been eliminated, China's grain production would likely increase by about 15.3%, that is, about 71.4 million tons of grain (Wan & Cheng, 2011:192).

Third, the deterioration of agricultural mechanization. Du Runsheng (1985:2) stated that "it is difficult to realize agricultural mechanization, large-scale use of science and technology, and the carrying out the agricultural infrastructure construction on the basis of a peasant economy". National statistics showed that the total area of land plowed by tractor had shrunk from about 42.2 million hectares in 1979 to 34.4 million hectares in 1985, and not until 1989 did the land area reach 42.6 million hectares (China National Bureau of Statistics, 1990:348). Some scholars' investigations confirmed the same situation: the proportion of the total area of land plowed by tractor has dropped from 41.3% in 1980 to 35.5% in 1988; and in some places, the agricultural machines have given way to animal power for ploughing, even human ploughing (Hinton, 1990:15; Cao *et al.*, 2001:62). It is the same in F County. The area of land cultivated by tractor has decreased 43.8 % in 1986, compared to 1978 (The Compiled Committee of Chorography of F County,1993:189).

The Promotion of Land Circulation

As a country with "more people, less land", the above mentioned drawbacks of the peasant economy will definitely affect China's food security and the realization of agricultural modernization. Even at the early stages of the reform, the top designers have claimed that "we are not in favor of the peasant economy forever fixed, we advocate the modernization of large-scale production", which "armed the agriculture with modern science and technology, implement the highly intensive operation and a high degree of social production" (Du, 1985:123-127). The most representative statement is "Two Leaps" of Chinese agriculture proposed by Deng Xiaoping in 1990:

"From a long-term point of view, the reform and development of agriculture in socialist China will proceed in two steps. The first leap was to abolish the people's communes and institute the responsibility system, the main form of which is the household contract that links remuneration to output. This system marks a great step forward and should remain unchanged for a long time to come. The second leap will be to introduce large-scale operations and to expand the collective economy, so as to facilitate scientific farming and socialized production. This will be another great step forward. Of course, it will be a long process". (Deng, 1994:343)

Although not specifically described, the critical mechanism to bridge these two leaps is land circulation. In fact, the state has begun to encourage land circulation even at the beginning of the implementation of HRS. At 1984 No.1 Policy Document, the state has "encourage(d) the land gradually concentrated to farming experts (Zhongtian nengshou)". As well as in 1986 No. Policy Document, the state has "encourage(d) the arable land concentrated to farming experts, cultivate(d) the specialist households with appropriate scale". The 1986 Land Management Law explicitly stipulated that "no unit and individuals may seize, buy, lease or illegal forms to transfer the land" (Article 2). However, the 1988 Revision of Land Management Law had deleted the form of "lease", and clearly defined that "stateowned land and collective-owned land use rights can be transferred according to laws". This change indicates that the land use rights can be transferred and leased legally. The 1993 No.11 Policy Document, (Zhongfa, 1993. No.11) also noted that, "with the premise of making land ownership and land use unchanged, and the permission of the contract-issuing party, then the land use right can be transferred with compensation according to laws; in some areas where having relatively developed secondary and tertiary industry, and most of the workers have shifted to the non-agricultural sector and have a steady income, could make the necessary adjustments to the contract land and promote a moderate scale operation from the local reality and the willingness of peasants". Following the spirit of 1993 No.11

Policy Document, "Opinions on Stabilize and Perfect Land Contract Relations" (*Guanyu wending he wanshan tudi chengbao guanxide yijian*) (Guofa, 1995. No.7) for the first time stipulated clearly that "the transfer of rural collective land contract and management rights is the continuation and development of the HRS, which should be included in the administrative scope of agricultural contract", and recommended to "establish the land contract management rights transfer mechanism".

Although allowing the transfer of land to some extent, at that time the state knew that large-scale land circulation had not yet been an option, because most of the rural labor still depended on the land to make a living. Only when a large number of rural laborers shifted from agricultural sector to the non-agricultural sector, that large-scale land circulation became a feasible option. This consideration was clearly reflected in the 1997 No.16 Policy Document entitled "Notice of the General Office of the CPC Central Committee and the General Office of the State Council on Further Stabilize and Perfect the Rural Land Contract Relations" (Zhonggong zhongyang guowuyuan bangongting guanyu jinyibu wending he wanshan nongcun tudi chengbao guanxi de tongzhi) (Zhongbanfa, 1997, No.16), which claimed that "more people, less land' is one of our basic national conditions, thus only when large-numbers of rural labor had moved to the secondary and tertiary industry, then it is possible to gradually promote the land scale operation. This condition, however, does not at this stage have effect on the vast majority of the countryside, therefore, it strictly prohibits the imposition of large-scale land operations by the way of administrative order, while not disregarding the objective conditions and the willingness of peasants". In 1998, "Decision of CPC Central Committee on Some Major Issues Concerning Agriculture and Rural Work" (Zhongfa, 1998) also pointed out that "the reasonable transfer of land use rights should adhere to the voluntary and compensatable principles and according to laws. It strictly prohibits to impose on peasant households to transfer land with any reasons. Only at a few areas where meeting the conditions, then can facilitate the

various forms of appropriate scale operation of land on the basis of improving agricultural intensification and the willingness of the masses". Obviously, these two policy documents both emphasized that the state only recommended to transfer land use rights and promote moderate scale operations legally with the voluntary and compensatable principles in a few indeed qualified economically developed areas. All in all, although the state has begun to encourage the transfer of land management rights before the year of 2000, the state still held a cautious attitude by and large and strictly prohibited local governments to be involved in land circulation, which intended to prevent the adverse impact on the stability of rural land contract relations. This is also why rural land circulation before 2000 was still mainly among peasant households and was spontaneous.

With the emergence of massive rural-urban migration and large-scale land abandonment, coupled with the adverse effects of the peasant economy, the land transfer issue was soon put on the state's agenda. In 2001, the CPC Central Committee issued the "Notice of Well Done the Transfer Work of Land Use Right of Peasant Households" (Guanyu zuohao nonghu chengbaodi shiyognuqan liuuzhuan gongzuo de tongzhi) (Zhongfa, 2001. No.18). In this Notice, the CPC Central Committee proposed the four core principles of land transfer: firstly, the land use right transfer of the peasant household contract land should be carried out under the premise of the long-term stability of HRS; secondly, the transfer of land use right must adhere to the principles of a legal, voluntary and compensatable process; thirdly, to regulate the actions of enterprises and urban residents to lease peasant contracted land; fourthly, to strengthen the leadership to the work for the transfer of land use rights. The publication of the Notice and the establishment of four core principles showed that the state has begun to handle the matter of rural land circulation, which officially opened the door to the rapid circulation and development of China's rural land.

Then in 2002, Rural Land Contracting Law made some detailed provisions for

rural land circulation from a legal perspective. The Law stipulated that "the right to operate contracted land obtained through the contracting by households may in accordance with the law be circulated by means of subcontract, lease, exchange, or transfer or by other means" (Article 32); in addition, "for the purpose of developing agricultural economy, different contract-undertaking parties may, at their free will, establish a joint group to which they contribute their right to operate the contracted land, and engage in joint agricultural production" (Article 42). However, "the term for the circulated contract shall not exceed the surplus of the duration of the contract already concluded" (Article 33). In order to ensure the legitimacy of the land transfer, the Law required that "a contract in written form shall be signed by both parties" (Article 37), but "if the contract-undertaking party assigns the land to a third party to cultivate it for less than one year, no written contract is compulsory" (Article 39). It's worth noting that the Law also related to the transfer of land as "contracted by other means". "In the event that rural land is contracted through such means as bid invitation, auction, and open consultation, if upon legitimate registration, a certificate of the right to operate the contracted land or certificate of right to operate the forest land are entitled to do so, the former right may according to the law be transferred, leased, used as shares or mortgages, or be circulated in other ways" (Article 49). Compared to these two types of contracted land, the land "contracted by other means" can be used as mortgages, while the land "contracted by households' cannot. However, this difference was eliminated in August 2015.

According to the Rural Land Contracting Law, the Chinese Ministry of Agriculture further developed and issued "Measures for the Administration of Transfer of Rural Land Contracted Management Right" (*Nongcun tudi chengbao jingyingquan liuzhuan guanli banfa*) (Nongyebuling, 2005. No.47) in 2005, which is actually a specific implementation guideline of land transfer process. Five ways of land transfer have been identified in detail in the 2005 Measures. First, "assignment" (*zhuanrang*), which refers to one contractor transferring the land contract management right to another peasant household permanently, and the rights and obligations of the land contract will be fulfilled by the latter. The former land contract relationship is self-terminating. The "assignment" is a permanent land transfer method, which will directly impact the stability of the HRS. Thus, the Measures stipulate that the peasant household assigning out the contracted land should engage in a stable occupation or have stable source of income. Another land transfer method, impacting the former land contract relation, is the "interchange" (huhuang). Interchange is the swapping of the contracted land and the corresponding land contract management rights between two contractors in the same village collective economic organization. It is because the assignment and interchange both impact the stability of rural land contract relations that the rights of management and approval of these two ways both belong to the agricultural administrative department at the County level. On the contrary, another three ways of land transfer do not change the previous land contract relation. "Subcontract" (zhuanbao), that is, in the same collective economic organization, one contractor transfers the land contract management right to another peasant household for a limited time. Different from the assignment, sub-contract does not alter the former land contract and the corresponding rights and obligations. "Conversion into shares" (rugu), which is a way in which different contactors are willing to convert their land contract management rights into shares to engage in joint agricultural production. The most common way however is the "lease" (chuzu). In this way, the contractor transfers the land contract management right to a third party for a limited time for a fee. In addition, the 2005 Measures requires the land transfer parties to sign a contract in written and standard form of contract (Article 21), in order to ensure the formality and legality of the land circulation.

With the introduction of 2005 Measures, an important aim of the state's rural work becomes clear: it is to build a "transfer market of land contracted management right". This aim is continually mentioned and emphasized in the No.1 Policy Documents from 2008 to 2014. In order to ensure the smooth development of land circulation, the corresponding auxiliary measures have also been initiated. In 2007, the Property Law included the land contracted management rights into the usufructuary category, which is actually a strengthening of land contracted management. In 2009 No.1 Policy Document, the state "carry out the pilot of land contracted management right registration, and implement the area, spatial location and the certificate of the contracted land to peasant households'. This is the work of the "confirmation of land right" (*Tudi quequan*), and the purpose of this work is to facilitate land circulation.

Taking the year of 1993 as the first year that the state officially proposed to promote land circulation, that is after more than 20 years of exploration, a complete set of institutional statements has been gradually formed. In 2014 No.1 Policy Document, the state claimed that "on the basis of implement the rural collective land system, to stabilize the contract right of peasant households, to liberalize the land management rights, and allow the land management rights to mortgage to financial institutions". Now, it is clear that the rights of rural land have been divided into three parts, namely, land ownership, land contract right and land management right. In 2004, CPC Central Committee and State Council issued "Comments to Guide the Rural Land Management Right Transfer Orderly and to Develop Agricultural Scale Management" (Gguanyu yindao nongcun tudi jingyignquan youxu liuzhuan fazhan nongye shidu guimo jingyign de yijian) (Zhongbanfa, 2014. No.61). In these Comments, the state again proposed to "adhere to collective land system, realize the separation of ownership, contract right and management right, guide the land management right transfer orderly, insist on the fundamental role of the family operation, actively cultivate new subject of agriculture to develop various forms of appropriate scale of operation, consolidate and perfect the rural basic management system". Clearly, there are two state aims in designing the "Separation of Three Rights Relating to Farmland" (Sanquan fenli). The first one is to maintain the stability of the HRS, and the second one is to cultivate the NSAs through the land management right transfer

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and develop agricultural scale management. This is the basic direction of the current reform of China's rural land system, which has been stated completely in the "Comprehensive Implementation Scheme of Deepen Rural Reform" (*Shenhua nongcun gaige zonghexing shishi fangan*) (Zhongbanfa, 2015) issued in 2015.

The basic direction for deepening the reform of the Chinese rural land system is to implement land ownership of the collective, stable the land contract right of peasant households, and liberalize the land management right. The implementation of the collective land system is to implement the legal provision – "the immovable and movable property of peasant collective belongs to the members of the collective", clearly define the collective membership of peasants, clarify the property right of the collective land, achieve clearity on the subject of collective property. The stabilization of peasant household land contract right is to implement the contracted management right of the collective land to each peasant household of the collective organization legally and impartially. The liberalization of land management rights is to allow the peasant households legally and voluntarily to transfer their land management right to the operational subject with a willingness and ability to develop one of the various forms of appropriate scale operations.

I have pointed out that there is an obvious contradiction between the HRS (peasant economy) and the goal of agricultural modernization (scale operation). To achieve the goal of agricultural modernization, the state should eliminate the land fragmentation problem brought about by HRS. From the foregoing analysis, we have also seen that a major principle of the state is to stabilize the HRS in the long term, which is an ideological premise to some extent. So, it is a thorny issue for the state: on the one hand, it should adhere to an unchanged HRS; while on the other hand, it needs to facilitate agricultural modernization through the formation of scale operations. How to deal with this dilemma?

Before attempting to answer this question, there is a need to examine the land fragmentation problem. Specifically, I argue that the land fragmentation issue actually consists of two levels – the institutional level and the operational level. The "land fragmentation in institutional level" is the rural land owned in dispersed plots by the peasant households, which actually is the "decentralization of land contract right". While "land fragmentation in operational level" is the land divided by the field boundaries and cultivated by each household, which is actually the "decentralization of land management right". Based on this distinction, we can find that it is the "land fragmentation in operational level" that directly impedes scale operations. The "land fragmentation in institutional level" also will hinder the scale operation, but it can play this role only combined with the "land fragmentation in operational level"; if not combined, then it cannot function alone.

I argue that the "Separation of Three Rights Relating to Farmland" is indeed the institutional innovation to solve this issue, which divides the "land fragmentation in operational level" and "land fragmentation in institutional level". The "Separation of Three Rights Relating to Farmland" can be summed up in one sentence - "to implement the land ownership of collective, to stabilize the land contract right of peasant households, and to liberalize the land management right". As mentioned above, the rural land right has been separated into two rights, the collective land system and the peasant households' land contracted management right as established in the HRS. Under the assignment of "Separation of Two Rights Relating to Farmland", the land contract right and the land management right are combined together, as well as the "land fragmentation in operational level" and "land fragmentation in institutional level". The land management right, however, was split from the previous land contracted management right with the assignment of "Separation of Three Rights Relating to Farmland". Therefore, after contracting the land from the collective economic organization, the peasant households have two choices: one is to cultivate the land by themselves (that is,

combine the land contract rights and the land management right together); the other is to transfer out the land management right (that is, the separation of land contract right and land management right). However, no matter which choice, the rural land contract relationship will not be changed. The land circulation is the transfer of the land management right, rather than the land contract right. Since the land contract relation is still kept stable, then the goal of adhering to the HRS (even though nominally) can be seen to be achieved. With the promotion of the land management right transfer, the goal of larger land scale operations also can be achieved.

In summary, the design of "Separation of Three Rights Relating to Farmland" does not solve the issue of "land fragmentation in institutional level", but solve the issue of "land fragmentation in operational level". The reason why the former issue is not solved is that "the stabilization and perfection of the land contract relation are the cornerstone of the party's rural policy, also the institutional basis to protect the interests of the peasant, promote agricultural development, and maintain the stability of the countryside" (Zhongfa, 2001. No.18). The reason why it should solve the latter is that "allowed to transfer the land use right orderly is an objective requirement for agricultural development"; "land transfer is the inevitable result of the development of the rural economy and the shift of rural labor" (ibid.). Through the separation of land contract right and land management right, the "Separation of Three Rights Relating to Farmland" successfully resolved the contradiction between the HRS and the objective of promoting land scale operations; maintain the HRS nominally and facilitate land transfer at the same time.

Although the design of "Separation of Three Rights Relating to Farmland" still adheres to the principle of collective land ownership, it is clear that the ownership is only an empty frame – the village collective economic organization nominally owns the land, it has no right to influence the actual operation of the land, and cannot gain any income by virtue of its land ownership. Similarly, peasant households can own the land contract right legally, but the reality is that the land contract right has transformed into a right to obtain a rent under the land transfer process. For most peasant households, the land will no longer be used as a means of production, but rather an immovable property to obtain some rent. Although the land itself cannot be traded freely, the land management right has actually been included under the broader heading of commodities (Walker, 1992:61). This shows that China's rural land has been conditionally commercialized, even when still holding to the collective land system.

Year	Areas of land	Total land contracted to peasant	Land transferred as a percentage of the total land contracted to peasant
	transferred	households	households
2006	55.5	1214.7	4.6
2007	63.7	1225.4	5.2
2008	109	1224.7	8.9
2009	151	1258.3	12
2010	186.7	1273.8	14.7
2011	228	1277	17.8
2012	278	1311.3	21.2
2013	341	1325.5	25.7
2014	403	1325.7	30.4

Table 2.5 The scale of land transfers in China, 2006-2014 (million mu)

Data sources: author's summary from various reports (Data of 2006,2007 cited from Zhang Luxiong, 2012:131; Data of 2008, 2009 cited from Zhang Dundun, 2014; Data of 2010-2014 cited from MOA, 2012, 2014, 2015).

No doubt, this key change has provided a precondition for a significant shift in China's agricultural production itself. In England and elsewhere, the land was separated from the peasants by the means of violence, while in China, the land is now divorced from the peasant household by way of institutional reform (although nominally the relation between them is much closer than before). Compared with the former, the latter is characterized by the passive nature of the transaction. Under the impetus of the state, the land circulation tide is sweeping the whole country. From Table 2.5, we can see that the total area of land transferred rapidly increased from 55.5 million mu in 2006 to 403 million mu in 2014, an average annual increase of 43.4 million mu. The proportion of land transferred in total land contracted to peasant households rose from 4.6 % in 2006 to 30.4% by 2014.

Summary

In regard to the question posed at the beginning of this chapter: Does China's collective land system really prevent the separation of land from peasant households, and does this essentially make a different picture of the agrarian change in Western countries?

This dissertation indicates that China's collective land system has not hindered the separation of land and peasant households, rather it has accelerated the separation process. Thus, China's agrarian change has not presented a very different picture from the Western countries. The above discussion does not mean I agree with the abolition of the collective land system. On the contrary, I argue that it is the mutation of the collective land system that makes it impossible to control the separation of land and peasant households.

In fact, China's collective land system began to mutate as early as the establishment of the HRS, namely, it changed from the collective land system in a full sense to an actual small-scale management land system by the "Separation of Two Rights Relating to Farmland". Thereafter, the small-scale management land system has been continuously strengthened by a series of laws and policies. Although the village collective economic organization owns the land, this land ownership has actually become a veneer due to the land contract management of peasant households.

To me, the small peasantry has been recreated after the implementation of the HRS. But the state wants more than this. A self-sufficient peasantry is obviously not the purpose of the State, but rather a group of efficient commodity producers. Under the impetus of the State, commodity relations have expanded rapidly in rural China. China's peasant households have been incorporated into a national market in the form of a "trilogy": the commodification of daily life, the commodification of production and the commodification of their bodies as laborers. This affiliation has changed China's peasant household survival mode from the "subsistence plus" mode to a "wage plus" mode. Further, this change has resulted in the devaluation of farmland among peasant households. Thus, some peasant households directly give up agricultural production and abandoned their farmland, while some transferred the land to their neighbors, relatives or friends spontaneously. The devaluation of farmland inevitably has had an effect on the production mode of peasant family farming, and has facilitated the rise of a "middle peasants" group. But the rise of "middle peasants" did not make a quality change to China's agricultural production, peasant family farming still held a predominant position.

However, this situation changed when the state began to promote land circulation. Land circulation actually is the conditional commercialization of farm land, which provides a prerequisite for the change in China's agricultural production itself. In this process, the most crucial reform was the institutional design "Separation of Three Rights Relating to Farmland". This institutional plan maintains the HRS and the rural collective land system in nominal form on the one hand; on the other, it actively promotes the transfer of land management rights and accelerates the separation of land from peasant households. In this case, China's rural land relations have begun to change in insidious ways and China's agricultural production mode also has started to change completely.

In the process of commercialization of the land, the state has obviously played an

important role. If without the reform of the rural land system, the commercialization of rural land and the rise of the agrarian capitalism would not have developed so quickly. In this sense, this dissertation argues that the state has played an important role in China's agrarian change, which is the role of midwife.

Chapter 3: The Death of a Peasantry: From Small Peasants to New Subjects of Agriculture

Usually, at about 5 pm. I see a red car passing along the road in front of my house. It is Liu Min driving to pick up his daughter from school. Liu is a successful "family farmer", who manages a farm with 404.5 mu of land. One time, we are talking about the issue of education at the local level. Liu said that "the primary education in P township lags behind too much. My daughter now is in 3rd grade, but she has not begun to learn English due to the lack of a qualified teacher". In order to ensure his daughter could receive a better education, Liu bought an apartment over 120 square meters in Wuhu. He plans to let his wife and daughter live there and send his daughter to a city primary school.

However, my neighbor Uncle Fu's family has another story. Uncle Fu is a farmer cultivating 6.6 mu of contracted land. Besides, he also has work in a grain processing plant in E village. Uncle Fu's first son and daughter-in-law work in Sichuan province all year around, and they leave their little daughter to Uncle Fu and his wife to take care of. In mid-2015, the daughter-in-law came back home to have a discussion with the aging couple about the little girl's primary education. She expected her daughter to be able to receive a better education in the primary school at F County, which means that Aunt Fu should also go to the county and take care of her granddaughter. Aunt Fu did not agree. She told me, "If I go to the county to take care of the little girl, the family cost will be great. I cannot find a job in the county". This affair has not yet been settled until the daughter-in-law went back to Sichuan. But the development of the young generation gave way to the economic reality of this family. In April 2016, when I came back to P township, Uncle Fu's granddaughter has enrolled in the primary school in P township, and was being picked up by her grandparents with a bike every day.

The difference between these two households is neither the biggest, nor the smallest one, but is very typical in P township. "Car and urban school", "bike and rural school" obviously are the new distinctions between the peasant households in P township. These new distinctions maybe not the direct outcome brought about by the agrarian transition in the past ten years, but obviously, are deeply influenced by the process. Although Liu Min and Uncle Fu can both be considered "farmers", they actually represent two different types of agricultural producers and production: the former one is the agricultural capitalist and the representative of the emerging capitalist agriculture, while the latter one is the small-scale farmer and represents the declining peasant family farming.

This chapter mainly intends to discuss how the small peasants as the original standard-bearers of China's agricultural production go into decline and collapse, and are replaced by the new subjects of agriculture (NSAs). This traces how China's agricultural production shifted from peasant family farming to capitalist agriculture. The discussion of this chapter is divided into two parts. Firstly, attention will be paid to the local practice of land circulation in P township. Secondly, I will explore what transformation China's agricultural production has been experiencing and how the small peasants have been differentiated.

Land Circulation in P Township

Agricultural Development Projects

In the 2005 No. 1 Policy Document of F County (F fa [2005] No.1), the County government states that "the industrialization of agriculture (*Nongye chanyehua*) is an important way to promote traditional agriculture transformed into modern agriculture, as well as a significant approach to increase the peasant household income". In this roadmap of development, P township, as the only agricultural

township in F County, occupies the most important position. The reality in P township, however, is that the agricultural infrastructure has been severely degraded, that is, the farmland has been highly fragmented. In addition, "the agricultural production mainly relies on women and the elderly, which leads to the extensive management and low land productivity and efficiency, thus the possibility of developing modern agriculture is non-existent" (P township government, 2010:1).

To promote the industrialization of agriculture, F Country government supported P township to gain a Land Consolidation (hereafter, LC) scheme from the Ministry of Land, and proposed an agricultural development orientation to P township, namely, "green home, eco-agriculture". With the 25.87 million yuan of funds from the national scheme, about 10,500 mu of land in three villages has been consolidated. Thereafter, with the support from the Country government, P township obtained another 40 million yuan of funds from the Integrated Agriculture Development (hereafter, IAD) scheme of the Ministry of Finance over three years. With these funds, about 12,000 mu of land in P township was consolidated (Table 3.1). Due the effective implementation of the agricultural projects, P township was identified as "Demonstration Zone of Modern Integrated Agricultural Development of Anhui Finance" (Anhui caizheng xiandai nongye zonghe kaifa shifanqu) by the Department of Finance of Anhui Province in 2012. Further, P township also has been identified as "Demonstration Zone of Modern Agriculture in Anhui Province" (Anhui shengji xiandai nongye shifanqu) in 2013. In addition to the funds from the central government, P township also gained great support from F County government. For instance, 4 million yuan each year was allocated to P township for a period of 5 years as the matching funds to construct the provincial agricultural demonstration zone from F County government (P township government, 2013). Totally, P township has received more than 350 million yuan for the construction of modern agriculture demonstration area since 2007.

Year	Projects	Funds	Total area	Farmland area
		(million yuan)	(mu)	(mu)
2007-2009	LC	25.87	18,600	10,500
2010-2011	IAD	8.89	10,000	1,500
2011-2012	IAD	15.59	17,500	4,000
2012-2013	IAD	15.53	16,000	6,500
2012-2013	LC	28.55	14,300	6,000
2013-2014	IAD	11.69	10,000	3,300
2009-2014	LC	200	1,500	1,200
2012-2013	IAD	4.98	3,000	3,000
2013-2014	IAD	9.6	10,000	10,000
2014-2015	IAD /LC	13	8,000	8,000
2015-2016	IAD	20.52	8,200	8,200
Total		354.22	115,600	62,200

Table 3.1 The projects implemented in Ping township from 2007 to 2015

Data source: 2007-2014 cited from Sun, 2015; 2014-2016 from the author's interviews

By the end of 2015, about 54,000 mu of land had been consolidated in P township, accounting for 92% of the township's total arable land. Recently, a high-standard farmland construction scheme was carried out in March 2016. Cited from the local officers' words, all the arable land in P township will be consolidated at the end of 2016. Relying on the huge amounts of money from national agricultural projects, the agricultural infrastructure in P township has been greatly improved in less than ten years. The previous numerous field boundaries have been cleared away, and the fields are now regularly divided into pieces ranging from 10-30 mu; the original irregular roads and ditches have also been re-planned and designed. These have become suitable for large agricultural machines. The new irrigation channels are spread out along the S and Z rivers. In a report of P township government (2010:3), it describes the landscape that, "the fields have become the modern fields suitable for moderate scale operation after the land consolidation, which characterized as fields into blocks (Tian chengkuai), roads and drainage connected (Lu xianglian, qu xiangtong), trees webbed (Lin chengwang), the fields can be irrigated when there is a drought (Han nengguan), and can be drained when there

is a flood (Lao nengpai)".

Clearly, so much funding invested in improving agriculture infrastructure in P township is not for the local small peasants, but for the NSAs. As the Ministry of Finance claimed on its website, "its (IAD) ultimate objectives are to deploy the agriculture production elements rationally, to improve the comprehensive agricultural productivity and market competitiveness, so as to promote the transition from traditional agriculture to modern agriculture." (MOF, 2010). Therefore, the principles guided P township government (2013:2) to promote the agricultural demonstration zone construction are "efficiency priority, project priority, scale priority, industry priority" (Xiaoyi youxian, xiangmu youxian, guimo youxian, chanye youxian). The local officer told me bluntly: "we mainly consider the needs of the 'big households' to transfer land, and the convenience for agriculture mechanized operation, not just the interests of the single peasant households, (when we carried out the projects)" (Cheng Gong); "the agriculture development scheme is indeed designed for the 'big households' to transfer the land" (Wu Jinhua). In addition, the project funds are all inclined to "dragon-head" enterprises, and the NASs. The peasant households have already been bypassed in this type of national agriculture development project.

No doubt, an excellent condition for land circulation has been created by these national agriculture development schemes. As mentioned above, the agricultural infrastructure in P township was severely degraded in the years after the Reform. With such a condition of damaged infrastructure and land fragmentation, no one dares to take over the land on a large scale. The agriculture infrastructure in P township, however, has been greatly changed with the implementation of the national agriculture development schemes. The agriculture infrastructure has been rehabilitated, and the land fragmentation problem has been resolved. It is in this sense that the national agriculture development projects play a catalytic role in

land circulation. As the deputy mayor of P township told me with a metaphor⁴, "Today, P township's agriculture is still in the initial stage, but now we have a good foundation here. Just like a nest has already been built, so we do not worry about the Phoenix not coming. As for where the Phoenix comes from, we do not know". "Nest" refers to large areas of land suitable for agricultural scale operation, while "Phoenix" refers to the agricultural producers who transferred the land in a large scale.

The Practice of Land Circulation in P Township

With the opportunity to implement agricultural development projects, P township began to actively promote land circulation. This section is divided into four parts, the first is to introduce how P township explored a new mode of land circulation; Second, how a land circulation platform was built at local level, including the administrative office and the land circulation contract; and third, how the peasant households in P township were mobilized by the local cadres to transfer out the contract land. Fourth, how the local officials encouraged various subjects of agriculture to transfer land.

Local Institutional Innovation and Practice

Combined with the land planning design of the state, F County and P township governments have developed a new land circulation mode. This new mode is titled as "separation of three rights relating to farmland, virtualized the land, twice land circulations, reasonable income, confirmed the contract right of the land but not its location" (*Sanquan fenli, xuni dikuai, liangci liuzhuan, helishouyi, quequan bu quejie*). This new mode of land circulation, on the one hand, follows the land

⁴In China., there is a saying that goes: "To plant a paulownia wood to attract the Phoenix" (*zaixia wutongshu, yinde fenghuang lai*).

system top-level design and divides the rural land rights into three parts, on the other hand, it is the operationalization of the top-level design. It is by virtue of this new mode that P township government has promoted the land circulation effectively.

"Separation of three rights relating to farmland" (*Sanquan fenli*) is divided the rural land rights into land ownership, land contract right and land management right, which follows the national top-level design as mentioned above. On the one hand, this design ensures that the land circulation will not affect the stability of land contract relations, that is, maintain the HRS. On the other hand, the transfer of land management right can solve the obstacle brought by the land fragmentation and facilitate an agricultural scale of operation. Therefore, the land ownership of collective economic organization and the land contract right of peasant households have been suspended by the land management right. By this separation, the obstacles in the way of land circulation have been cleared at the institutional level.

"Virtualized the land" (*Xuni dikuai*) and "confirmed contract right of land but not its location" (*Quequan bu quejie*) are actually two support mechanisms for the "Separation of three right relating to farmland". To be specific, "virtualized the land" refers to when an agricultural project is implemented in an area, the existing field boundaries of peasant households will be broken in the project area, and then the land will be redistributed among the village groups, not among peasant households. By this method, all the land of the peasant households in the same village group is concentrated together. Thus, the land of each peasant household is virtualized in the village group.

The next step is "confirmed contract right of land but not its location". After the land was redistributed among the village groups, it will not be further divided inside the village group. That is, the peasant households still own the land contract right legally, but they do not know the location of the contract land, because it has been virtualized inside the same village group. For the peasant households, their land contract right will be booked in and approved by a "certificate of arable land interests" (Gengdi quanyi zhengshu). In this certificate, only their contract land area is stated, but not the land's location. So, this certificate is actually a certificate of beneficiary right after the land is transferred. It is worth noting that the position of the village group has been raised by these two designs. In the HRS, the land is generally divided among each peasant household. In P township, however, the land is divided among village' groups, not peasant households. In this way, the original land contract right and contract area of each peasant household have not been changed, but the land management right in any one village group is concentrated, which is enough to promote land scale operations. An officer in M village stated explicitly that "the purpose of the 'confirmed contract right of land but not its location' is to provide a service to the land circulation". In addition, the differences in quality among different plots of land, e.g. soil fertility, irrigation, location, etc., are all eliminated. The difference among the peasant households only leaves the area of the contract land. Therefore, the possibility of a dispute caused by differences in land quality has been eliminated. Now, the land rent is paid only in accordance with the land area, rather the land quality.

In practice, however, there may still be some disputes about the contract land area, which are mainly caused by the construction of new farm roads and ditches. In order to avoid these disputes, the P township government issued a policy named "increase or decrease the land area in the same proportion" (*Tongzeng tongjian*). To be specific, the total area of land of one village group and its proportion in the whole project zone should be calculated before the land consolidation. Then after land consolidation, the total area of land of the project zone can be re-measured and compared with the previous total land area. If the land area of the project zone has decreased, then the decreased/increased land area will be distributed to the village groups in the project zone in accordance with the previous proportion. It is the same as the land area for each peasant household. According to P township

officers, the total area of land in project zone usually decreases, because the new farm roads and ditches always covert some land area. In general, the total area of land usually shrank about 15%, that is, 100 mu of land will be reduced to 85 mu of land. Thus, the total area of land of each village group and peasant households will also be reduced by about 15%. ⁵

After that, the next step is "twice land circulations", which includes "up and down" two processes. The so-called "up" is that all the peasant households consign their land management right to the village collective in a unified written contract which authorizes the latter to transfer out their land management rights. While the "down" is about the peasant households that want to cultivate the land by themselves, which they can do by applying to the village collective. As long as the peasant households submit an application, then the village collective must ensure the peasant households have a piece of land to cultivate. In general, the village collective will arrange a piece of land near the roads and ditches for those peasant households to avoid the impact on the land scale operation. Sometimes, the village collective will arrange the best arable land for these peasant households in order to reduce their grievances. Under this arrangement, these peasant households cultivate a piece of land in the same area of their previous contract land, but in a different place.

Through agricultural development projects and institutional design, P township government has effectively solved the land fragmentation at the management level. So, the next task is how to promote smooth land circulation. A crucial question in the land circulation issue is how to ensure the interests of the land flowing side (peasant households) and land inflow sides (various subjects of agriculture), which involves the question of what is a "reasonable income". To be more specific, the

⁵The previous measurement of land area, called "*lao mu*", in P town is different from the one used by the government. Usually, 1 "*lao mu*" is about 1.5-2 "mu". After the land consolidation, the "*lao mu*" has been abolished and replaced by "mu", therefore, even though the actual land area is reduced, the figure in the "certificate of arable land interests" are increased rather than decreased.

"reasonable income" refers to the interests of both sides of the land circulation process, to make them both satisfied. It includes two aspects, namely, transfer time and land rent. The Director of Agriculture Office in P township told me,

"For the land flowing side, if the transfer time is too long, they will be embarrassed to raise the land rent. While for the land inflow side, if the time is too short, then it will not be worthwhile to transfer the land. (They may say that:) 'I just invest a large amount of money in some fixed assets and buy some large machines, but the transfer time is up, so what shall I do?""

In fact, most of the peasant households are willing to transfer out their land management rights, but not for a long time. It is mainly because that they may lose the land value-added benefits when the land circulation price is rising year by year. By contrast, the land inflow parties are very keen to extend the land circulation time, because only within a relatively long transfer time, can they can gain more returns from their investments.

In order to be seen as fair, even nominally, a regular consultation mechanism has been established in P township. On October 1st each year, the village cadres, village group leaders, representatives of villagers and land inflow parties will be convened together by P township government to discuss together the issues of land circulation time and land rent. Through years of exploration and development, this regular consultation mechanism has become a widely accepted practice. Through the negotiation among the above actors, the land circulation time in the two villages was 8 years, while one village was 10 years in the first round of land circulation. Thereafter, most of the transfer time was between 5-10 years. As for the land rent, it was confirmed to be 400 jin of grain per year per mu in the first round of land circulation. The land rent is paid in cash, and taking the grain's market price on 31st October as standard. By 2016, the land rent had risen to 500 jin of grain per year per mu in P township. With the large amounts of funds obtained from the Ministry of Finance and the Ministry of Land, agricultural production conditions in P township have been greatly improved, which provides a good foundation for scale agriculture operations. At the same time, some new designs and institutional innovations have been made by P township government, which successfully facilitates the transfer of the land management right and the maintenance of the land contract rights of peasant households. If the central government has only pictured a road map of land circulation, then from the example of P township, we find that the local government has successfully figured out the operational measures of land circulation. All in all, the land originally dispersed among peasant households has now been concentrated and combined with the capital from the land circulation market aided by the local government.

The Platform for Land Circulation

The spontaneous land circulation, which is large scale, already existed in P township in 2000. A government report of P township in 2013 introduced this kind of land circulation. "The early land circulation in countryside is the spontaneous land circulation between peasant households, mainly in the forms of help to cultivate (*Daigeng*), unpaid subcontract (*Wuchang zhuanbao*), subsidized subcontract (*Daotie zhuanbao*) and so on; In this kind land circulation, the land flowing side always actively requests the land inflow side; The purpose of the land circulation is to prevent land abandonment and transfer the agricultural tax"; The dispersed land parcels are transferred between peasant households, rather than on a large scale; The spontaneous land circulation between peasant households was considered to be "disordered" and "casual" in this government report. To the end, the report stresses that the government should regulate the land circulation in P township, "making it change from the fragmented form to a large-scale form; from

the forms of help to cultivate, unpaid subcontract, subsidized subcontract to the forms of lease and paid subcontract, which contributes to a land circulation market; from the oral contract to the written contract; from disorder to order (P township government, 2013a). Following a policy document, entitled "Suggestions on the Work to Promote the Transfer of Rural Land Contracted Management Right" (Fanban [2009] No.27), issued by F Country government, P township government facilitated the land circulation market mainly in the following ways:

The first is to "establish and improve the rural land circulation service system, and gradually establish a tangible rural land circulation market" (Article 23). In order to promote the land circulation, a "Rural Land Management Transfer Service Center" was established in P township in 2008. This Service Center and the "Rural Economic Work Station" (*Nongcun jingji gongzuo guanlizhan*) actually work together under one roof, and the director of the Work Station serves concurrently as the director of the Service Center. According to the regulation, the expenses of the Service Center and Work Station are included in the budget at the same level of government. It means that the Service Center is actually a government agency. At the village level, the "Rural Land Management Right Transfer Service Station" has been established. Usually, the village accountant takes charge of the daily work of the Service Station.

The land circulation process in P township is generally carried out according to the following steps. First, the village Service Station collects the information of the land that can be transferred in the home villages; then they report this information to the township Service Center. Second, after gathering the information from the village Service Stations, the township Service Center releases the information about the land area, location, soil quality and so on through various channels. Sometimes, the township Service Center requires the village cadres to find various people with agriculture interests who might be looking for land through their personal relationships. Third, anyone who has a mind to acquire land can go to the

township Service Center to have a consultation. Then the Service Center will link the subject with the village collective to have a specific negotiation. Fourth, if the two sides make an agreement, then they will go to the Service Center and sign a standard land circulation contract. After the agricultural producers accept the land, the village Service Station needs to continue to provide the support services, e.g. water, electricity and so on.

The township Service Center and the village Service Station have different responsibilities. As for the township Service Center, its main duty is to "collect and release the information of land availability, guide the signing of the transfer contract, establish and improve land contracts and land circulation records, enhance the management of records, supervise the performance of the contract land circulation process, carry out the advocacy work of land circulation policy and the education work of abiding by the contract" (ibid.). While for the village Service Station, its main duty is "communicating the information, to file the contracts, to coordinate the work of land exchange, and mediate the contradictions and disputes" (ibid.). In addition, another important duty is to deal with the collection and payment of land rent. Before the given time in each year, the land inflow side should transfer the land rent into the bank account of the township Service Center. On the other side, the village Service Stations should submit the list of peasant households by name, land rent and bank accounts to the township Service Center. Then, the township Service Center will directly transfer the land rent to each peasant households' bank account, without going through the village collective. From the name, we can know that the township Service Center and the village Service Station are just two kinds of service agencies, that is, the play a facilitating role in land circulation. They don't sign the contract with the land flowing side or the land inflow side.

The second is to standardize the procedure of land circulation. "The rural land circulation must be signed the standard written contract on the basis of consensus.

When the peasant households authorize the village collective organization or land circulation intermediary service organization to transfer their land management rights, a written authorization agreement must be signed" (Article 22). In P township, there are two standard contracts that should be signed in the procedure of land circulation.

The first contract is named "The Commission Contract of Rural Land Contracted Management Transfer Right in F County" (Fxian nongcun tudi chengbao jingyingquan liuzhuan weituo hetong). The contract parties are peasant households (Party A) and the village collective economic organization (Party B). The main content of this commission contract is that the peasant households authorize the village collective economic organization to transfer their land management rights. The first term of this contract is the basic information on the land, including the name, size, grade, and location. The second term is the entrusted time, which is unified in one village and is between 5-10 years generally in P township. The third term is the forms of land circulation, including lease or subcontract. Actually, the formal land circulation in P township is all in the form of leasehold. The fourth and fifth terms are respectively the land circulation fee and the payment time. The land rent is 400 jin medium grain per mu per year. The land rent should be paid before the new agricultural producers cultivate the land. The sixth term is the rights owned by the village collective economic organization. The seventh term is the responsibility of breach of contract, namely, estimating and liquidated damages for compensation. The last one includes other matters, 1) when there is a dispute, the two parties can submit to the P township government, and to the rural land contract arbitration institution of P township, and finally they can also directly bring a lawsuit to the people's court. 2) The contract is done in quadruplicate with each party having one copy, and the County and township Land circulation service center each having one copy.

The second contract is "The Subcontract (Lease Contract) of Rural Land

Contracted Management Right in F County" (Fxian nongcun tudi chengbao jingyingquan zhuanbao (chuzu) hetong). The contract parties are village collective economic organization (Party A) and subjects of agriculture (Party B). The first term to the third term of this contract, is about the basic information of the land, the transfer time and the transfer fee. The fourth and fifth terms regulate that Party B should pay the land rent in cash before the appointed time every year, while Party A should deliver the land to Party B after Party A has paid the land rent. The sixth term is a special agreement on the rights and obligations of both parties. The main right of the Party A is to supervise whether or not Party B has changed the land use purpose from agriculture to another. When there is a natural disaster, Party B can enjoy the disaster relief funds from the higher level government, and Party A should transfer these funds to Party B. Party B can subcontract the land to other agricultural producers after obtaining a consent from the original land contractor (peasant households). In the contract period, Party B enjoys all the support policies related to production, including the application of new varieties, promotion of new technologies, and so on. The seventh term is about the changing and withdrawing of the contract. When there is a land acquisition project from the state and collective, both parties should be subjected to this requirement. If one party does not deliver the land or pay the land rent, the other party has the right to terminate the contract. The eighth term is a breach of contract. Any breach by a party should pay liquidating damages to the other; and if the breach has caused a loss, the breaching party should compensate the other for the corresponding economic loss. The ninth is a controversial provision. The ways of handling disputes are the same as in the above commission contract. The tenth is the entry-into-force condition, that is, the contract can take effect only if it has been signed by both parties and gone through the record (or authentication) of the township land circulation service center. The last one is for other terms. The main contents include: if the land is lawfully requisitioned, then Party A obtains the corresponding land compensation and resettlement subsidy, while Party B gains the corresponding ground attachment compensation fees and compensation for young crops. When the contract expires, Party B enjoys the priority to transfer the land again under the same conditions. The land circulation contract is done in quintuplicate with each party having one copy, the county and township land circulation service center each having one copy, and the contract-issuing party (peasant households) owning one copy.

In brief, the main purpose of the local government in actively building the land circulation platform is to facilitate land circulation rapidly and orderly, and further to achieve the agricultural modernization and the increase in peasant household incomes. This platform includes two aspects: One is a three level land circulation service system, which is responsible for the administration of land circulation. The other is a standardized and transparent procedure for land circulation, which takes two written contracts as its basis. Contrast to the spontaneous land circulation between peasant households, land circulation promoted by the government is institutionalized and standardized at least on paper.

In the research enquiry, the P township officials repeatedly stressed that the government intended to maintain the interests of the two sides of the land circulation fairly. At the beginning of the two contracts, the principles of legality, equality, voluntary and compensable are presented clearly. Through analyzing the contents of the two contracts, however, we can find that the land flowing party (peasant households) and the land inflow party (subjects of agriculture) actually are not equal in the land circulation process: the former party lies in a weak position, while the latter party is in a strong position.

The weak position of the peasant households mainly represents at: 1) Low land rent. The land rent in P township is 400 jin of grain per year per mu, which could be converted into 540 yuan in 2015. If the peasant households cultivate the land by themselves, they can obtain about 1100 yuan per mu per year by double cropping rice, besides their own grain ration. 2) The relative long land tenure. The land tenure in P township is between 5 to 10 years. Although a village meeting will be held before the land circulation, the main purpose of which is to persuade the villagers to accept the land tenure that has already been determined by the government. In fact, the peasant households basically do not have a bargaining right. 3) The relations between the peasant households and their contract land will be substantially cut off after they sign the land circulation contract, other than receiving the land rent. Sometimes, even the land rent will not be assured. Even worse, because of the procedure of land circulation in P township, the peasant households, as the land flowing party, do not directly sign the land circulation contract with the agricultural newcomers, as the land inflow party, such that if the latter party commits some non-performance actions, the peasant households cannot insist on accountability. They have to go through the village collective economic organization, which is another daunting procedure.

By contrast, the agricultural newcomers are in a strong position, mainly because: 1) they have quasi-complete land management right. After transferring the land, they have an independent right of management, including growing non-grain crops. Even the prohibition of changing the agricultural land use has been abrogated. For example, about 3,000 mu of land in J village has been excavated into pools to breed lobster and to plant lotus. 2) Except the agricultural subsidy related to the land contract right, they can obtain all other agricultural subsidies from the government. 3) They can subcontract the land that has been transferred. Although the subcontract needs to be approved by the peasant households, that is not really the case. In the first round land circulation in P township, most of the subjects of agriculture subcontracted the land and charged from 80-100 yuan per mu per year. 4) Although the terms of the contract expressly regulate that the operational subjects of agriculture should pay land rent on time, otherwise regarded as the breach of contract, but the reality is that delays in payment often happen. However, the village collective economic organization and the township land circulation service center actually do not play the role as land circulation supervisors.

The Mobilizations to Transfer out Farmland

The foregoing discussion has created a serious question, that is, since peasant households are at a distinct disadvantage, why do they still choose to transfer out the land?

As mentioned above, a spontaneous land circulation had already risen among the peasant households in P township, before the rise of the formal land circulation. We have explained the main reasons, namely, one is "cannot earn money from farming", the other is that the agricultural income has no longer constituted the main source of household's income. As Fang Yinhua, the accountant of I village, commented,

My family owns 3 mu of land, but why do I need to cultivate it? What function will the 3 mu of land play to my family's income? Maybe I could cultivate more land, or maybe I do not cultivate any. When I cultivate this 3 mu of land, it not only affects my work, but it also hinders me from moving out as a migrant worker. It is meaningless for me to cultivate this 3 mu of land.

In P township, the peasant households that have been willing to transfer the land spontaneously are mostly the peasant households of migrant workers. They have already transferred all or part of their contract land to the middle peasants with a price of 100 jin of grain per year per mu before 2007. After 2007, with the land circulation fee up to 400 jin of grain, they have become more active in transferring out the land in the formal land circulation market. From the situation of each village, this part of peasant households willing to transfer out their land accounts for about 50% of the whole peasant households in P township.

But indeed there are many peasant households unwilling to transfer out the land. They include two groups: one is the middle peasants who have transferred in land spontaneously. For the group of middle peasants, most of them have lost the land due to the increase in the land circulation fee after 2007. So, on the one hand, they are against the formal land circulation, and in addition, they do not want to transfer out their contract land. In fact, the middle peasants are the strongest resisters of formal land circulation in P township.

"The formal land circulation caused significant loss to the previous 'big households', who have transferred land before 2007. At that time, they could obtain a good income due to being nearly free of the land rent. Now, the land rent has risen to 400 jin of grain, which resulted in their losses. So, this group of people object to the formal land circulation. They expect to go back to the previous time when they can still transfer 10 mu or 20 mu of land. These people are aged around 50-60 years old. They are the first ones to object to the formal land circulation, because this damages their interests". (Fang Yinhua)

Another group unwilling to transfer their land are already over 60 years of age, and are too old to find a job in urban areas. However, their family finances do not allow them to retire, so they still have to cultivate their own contract land to maintain subsistence.

"We are too old, and nobody wants to hire us in urban areas. I do not need to buy food if I cultivate my land and raise some chickens. Besides, I can schedule my time very well, and will not be idle at home, which is much better than work outside. If transferring the land to the "big households", I can gain 400 jin of grain per mu per year. Once signing the contract, however, I cannot take back my land in 6 years. For these people, who are too old to cultivate the land and can only stay at home to look after their grandchildren, they eagerly look forward to transferring out the land. For me, however, I am not as old as them, I still am still able to cultivate the land, so I do it by myself". (Xu Longxiu)

"Why should I transfer the land to the 'big households'? I am too old to go out to work. So I have to do some farming to maintain a basic living … Now, the plowing or the harvesting services are both very convenient to buy. What I only need to do is take care of the water in the field. Do the farming, then I can have the grain to raise some chickens and ducks, which can feed my grandson and my families. After all, I do not have the money to buy meat on the market. If I transfer the land to the 'big households', I' ve got nothing. You can only buy rice on the market, which is not only expensive, but also poor quality. If I do the farming by myself, besides the grain ration, the land rent of 400 jin of grain given by the 'big households' can also be earned back within one season of early rice. Then I still have one season of late rice to sell". (Xu Feng)

For the local government, these two types of resistant peasant households have become the focus of their mobilization efforts. The mobilization work mainly consists of two parts: the advocacy work in the whole township, and the ideological mobilization directed to peasant households.

When carrying out agricultural development projects, P township government has already issued "A Letter to the Peasant Households" (*Gao nonghu shu*). In this open letter, the P township government stated "three benefits" to transfer the land, that is, "help to improve land utilization and productivity, help the surplus labor to better engage in other industries, help farmers increase production and income". Specifically, the implementation of large scale and intensive management of the production process can improve land productivity and economic efficiency, and promote the development of modern agriculture; Carrying out the various forms of land circulation in an orderly fashion can help to separate the farmers from the land and enable part of them to engage in other industries; After land circulation, the farmers can not only acquire the land rent, but also move out as migrant workers or find a job in the scale farms, which will increase their revenue.

Obviously, the above publicity is large and empty, so the role it plays actually is very limited. It is the ideological mobilization direct to peasant households that play a key role in the land circulation mobilization. Like many other rural works, the village cadres mainly adopted the "favors" (*Renqing*), "face" (*Mianzi*), "the people near the house door" (*Jia menkou ren*) and other social relationships with the villagers to do the work. In general, each cadre in the village meeting will be invoked by the village groups to do the mobilization work. A village meeting will be invoked by the village group. After this meeting, the village cadre together with the group's leader will go directly to villagers' homes one by one to lobby the villagers to transfer out their contract land.

One way to do the ideological mobilization work is called "wheel war" (*Chenlun zhan*), namely, the cadre will continue to look for the villager to do the ideological work until he agrees to transfer his contract land. In this case, most of the villagers will eventually agree to the transfer the land because of the social relations of "face" and "the people near the house door". For example, the accountant of I village successfully mobilized nearly all of the peasant households (only one household left) in two villager groups to transfer out their contract land. She introduced the process to me.

In my home village ... there is no one aged less than 50 years still farming. It is the elders who are aged about 60-70 years that still do farming. For these people, they have done farming nearly their whole life, thus they were not willing mentally to transfer land. In the first round land circulation, the persuasion work is really hard to do. We need to hold a meeting in the village group at night, because there is nobody at home at the daytime. The night meeting generally would last several hours until 10 pm. If not successful, it would go on the next night … Like the two villager groups near my house door … when we enter into doing the mobilization work, there were 3 or 4 peasant households (middle peasants) strongly against the formal land circulation. Because they knew that they were 50 years old, and nobody would hire them in the urban areas. So, it was better to cultivate dozens of mu of land, which could bring them an income of about 20,000-30,000 yuan each year. So, these people are the first ones to stand up against land circulation. Finally, there was only one peasant household left to cultivate his own 3.2 mu of land, after the ideological work … other peasant households all agreed to transfer out their contract land in these two village groups. (Fang Yinhua)

In addition, the cadres will mobilize peasant households to transfer out their land through the "counting" (*Suan bi zhang*) approach. The most general sweet words used to mobilize the peasant households to transfer the land are that, the peasant households can obtain two incomes: one is a guaranteed land rent, the other one is a salary by selling their labor on the scale farms.

(My question to a villager), "what do these plots of land bring for you? The land rent is not low, now it is 540 yuan per mu. If cultivating the land by yourself, you maybe cannot earn 540 yuan so easily … you operation is small, thus you cannot enjoy the subsidy from the state. In general, most of the villagers can be persuaded … We will tell the villagers that if they transfer out the land, they can find some work to do on the farms of the 'big households', which can earn them reliable money. It is the same thing." (Wang Niu)

Peasant households cultivating the contract land by themselves are very few. Some people didn't transfer out the land because of a complex land situation. However, they will transfer the land after 1-3 years. Why? Because if one couple only cultivates 5 mu of land, they can earn about 200-300 yuan per mu per year, that is, about 1,500 yuan per year in good weather.⁶ But this amount of money can be earned in one week if this couple goes out as migrant workers … Actually, we will tell the villagers that 'if you have nothing to do after the land circulation, you still can sell labor to the big households' … A peasant household cannot make a living by only relying on 3-5 mu of land. In today's rural areas, there are so many ceremonies, including weddings, funerals, and so on. The villager should give 200-300 yuan at every ceremony as a gift. If there are 7-8 ceremonies one year, then the farming revenue is gone. (Cheng Gong)

With the advocacy and the mobilization of the village cadres, most of the peasant households in P township are indeed involved in the land circulation process, although some are not willing to transfer out their land. In 2008, the proportion of the land transferred in the first three villages was as high as 90%.

The Encouragements to Transfer Farmland

Agricultural development projects, land circulation system design and mobilization by the local government have already prepared suitable conditions for large-scale land circulation. As deputy mayor of the P township said, a "nest" has been built and we are only waiting for the "phoenix". Then what kinds of "phoenixes" is the P township government waiting for? It seems from the government report this includes six kinds, namely, farming experts (*Zhongtian nengren*) and breeding experts (*Yangzhi nengren*), agricultural technicians, successful local people at outside (*Benzhen waichu chenggong renshi*), dragonhead enterprises, wealthy outsiders (*You jingji shili de waidiren*), farmer specializing in cooperative economic organization (P township government,

⁶ This is not true. According to my interview, 5 mu of land can create at least 5,000 yuan per year. The purpose of this town government officer maybe is to devalue the revenue of peasants' self-cultivation.

In fact, how to attract these "phoenixes" is indeed a pressing issue for the P township government. The framework of the formal land circulation market has been built up, however, if there are no "persons" in the market, then most likely the groundwork done before will come to naught. In May 2008, about 10,000 mu of land had been consolidated and prepared for transfer, however, there was no one willing to transfer the land whether local people or the outsiders. Perhaps because of the problem of lack of managerial experience. They are aware of the hard work and the risks of farming. More importantly, it is a financial matter. It is not a small amount of money to transfer the land. In 2008, the land rent was 360 yuan per mu, then one needed 36,000 yuan to transfer 100 mu of land. If including the cost of agricultural inputs, the total cost to run a farm with 100 mu of land is about 50,000 yuan at least. However, the P township government actively promoted large-scale management (at least 500 mu of land) at that time. Thus, the total required was about 250,000 yuan at least. Obviously, everyone would think twice when they invest such a large amount of money into an enterprise with unknown risks. This situation has made the local government officials look like the ants on a hot pan. "At that time, no one dared to transfer the land. It is incredible if about 10,000 mu of land misses the planting season and is abandoned. It is a matter of several millions jin of grain". (Cheng Gong)

Confronted with this situation, P township government started another mobilization approach, that is, to encourage someone to transfer the land. The primary target was the largest grain trader Cao Dafu in P township. The reason was that this company has the economic strength to transfer land and ensure the payment for the land rent on time. In order to mobilize the transfer-in land, P township government promised to provide preferential policies and conditions for the company, one of which was the 50 jin of grain per mu as the land rent subsidy. Finally, Cao signed a contract to transfer 2,244.03 mu of land for 8 years. Subsequently, three merchants from F County jointly transferred 2,003.6 mu of land, the original county seeds company manager transferred 1,029.35 mu, merchant Yang Chunfeng transferred 1,076.51 mu, the boss of a cereal and oil company in P township and other 5 persons jointly transferred 1,100 mu, an agricultural machinery merchant from another County transferred 1,061 mu, and a building materials dealer from another County, Xu Linbao, transferred 638.58 mu.

With the above land circulation tactic, the gate of formal land circulation in P township was opened. Although the plight of no one daring to transfer land has been temporarily solved, how to mobilize more subjects of agriculture to transfer land and stimulate the land circulation market are still the big questions the P township government needed to solve. Therefore, the local government has mainly adopted two types of incentives: one is to directly provide various financial subsidies to a new agricultural enterprise, and the other one is to support the agricultural enterprise with a wide range of agricultural services.

Direct financial subsidies can be divided into two categories, namely, land circulation subsidy and agricultural insurance subsidy. The 27th Policy Document of F County in 2009 stipulated that, the subjects of agriculture, who transfer more than 50 mu of land for longer than 3 years with a transfer fee no less than 300 jin of grain per year per mu, can enjoy a one-time award of 80 yuan per mu (Article 13). As for the subjects of agriculture who transfer more than 100 mu of land with a transfer fee no less than 350 jin of grain per year per mu, could obtain an award of 50 yuan per mu per year during the contract time. If the transfer fee was no less than 400 jin of grain per year per mu, then the award can be increased to 60 yuan per mu per year during the contract time. If the transfer fee is no less than 450 jin of grain per year per mu, then the reward can be up to 80 yuan per mu per year during the contract time (Article 14). The necessary funds can be borne jointly by county and township governments.

Clearly, the more the land transferred, the higher the rent, the more subsidy the subjects of agriculture can enjoy. In P township, the subjects of agriculture registered in the list of township government all transfer more than 100 mu of land with a rent of 400 jin of grain per year per mu. Therefore, in accordance with the above provisions, these subjects can gain a reward of 60 yuan per year per mu. Clearly, this incentive is effective. In my interviews in 2015, some subjects of agriculture whose farm scale was less than 100 mu are preparing to expand the scale in the new year, in order to obtain the government subsidy. For example, an agricultural producer with 92 mu of land told me:

"If you plan to transfer land, you'd better transfer more. If you transfer less, you cannot earn money … I plan to transfer another 8 mu of land and then to apply for a title of the family farm in the second half of this year (2015). The land circulation fee has not changed, just only pay a deposit. Now the government's agricultural policies are good, but we cannot enjoy (due to my relative small farm scale)." (Wang Ning)

Another government subsidy is the agricultural insurance subsidy. A policy for agricultural insurance was proposed in 2008 by the Anhui provincial government as a preferential policy for farmers. According to regulations, the premium of the agricultural insurance is borne by the government and farmers in accordance in an 80% to 20% ratio. Agricultural insurance mainly includes the following six types of crops shown in Table 3.2.

Take rice and wheat for example, the total premium of rice is 19.8 (330 * 6%) yuan per mu, in which farmers need to pay 3.96 yuan (19.8 * 20%), and the remaining 15.84 yuan is paid by the government. The total premium for wheat is 12.15 (270 * 4.5%) yuan per mu, in which the farmers pay 2.43 yuan, while the government pays 9.72 yuan. The above expenses are for all the farmers in Anhui province. Based upon this, the F country government further provides the preferential policy to the scale farmer. The 27th Policy Document of F County stipulated that "the 50% of the individual part of the premium is paid by the county finance" (Article 17). The subjects of agriculture only need to pay 1.98 (3.96 * 50%) yuan per mu premium for the rice, while 1.215 (2.43 * 50%) per mu for the wheat. The whole cost of agricultural insurance is not large, but it is still an incentive to encourage agricultural producers to transfer land and operate large units.

Insurance	Insurance amount	Rate	The premium paid by the		
	(yuan/mu)	(%)	farmers (20%) (yuan/mu)		
Rice	330	6	3.96		
Cotton	340	6	4.08		
Oilseed Rape	270	6	3.24		
Wheat	270	4.5	2.43		
Corn	250	6	3.00		
Soybean	170	6	2.04		

Table 3.2 The agricultural insurance policy

In addition to these direct financial subsidies, the local government also provides various types of agricultural services to the scale farmer, mainly in the following two categories:

The first one is the provision of agricultural technical services. For many people renting out their land, some of them lack the basic agricultural production experience and knowledge. Actually, they just regard the land circulation as a business similar to other industries. Therefore, the agricultural sector of the P township government supports them with thoughtful agricultural technical services. The Integrated Agricultural Service Center (*Nongye zonghe fuwu zhongxin*) of P township provides the scale farmer with free agricultural technical advice and guidance. As one scale farmer said:

"No matter what kinds of questions, we can directly go to (the Integrated

Agricultural Service) and have a consultation, e.g. using what kinds of farm chemicals … Sometimes, I find a disease on the leaves in the field, then I will take one or two leaves and show them to director Tao. If he thinks that it is not a problem, then I will leave it. But if this is a common phenomenon, then he will give a call to the County Agricultural Committee and ask it to send some experts to have a check in the field". (Liu Guanshan)

Besides, The Integrated Agricultural Service Center also regularly issues "Pests Information" (*Zhichong qingbao*) to remind the agricultural producers to prevent and deal with the pests and diseases in advance. The majority of the scale farmer deem it as very helpful. In addition, the Integrated Agricultural Service Center will organize some training courses for the scale farmers on an ad hoc basis. In these courses, the experts from related fields will be invited to give some information on seeds, farm chemicals, fertilizers and agricultural machines.

The second one is the credit service. In the 27th Policy Document of F County, the government required that "financial institutions should strengthen credit support to the scale farmer and give a certain credit line to some strong and reputable operational subjects. The County Rural Credit Cooperative should arrange a certain amount of credit funds each year to meet the funding needs of the scale farmer who transferred more than 100 mu of land with a transfer fee no less than 300 jin of grain per year per mu for longer than 3 years" (Article 16).

A pamphlet from a meeting gives a simple introduction to this kind of credit service. The Jianxin Rural Bank in F County provides a credit program called "Benefiting-farmers Loan" (*Huinong dai*). The main purpose of this credit program is to solve the financial matters of the 'big households', family farms, farmers' specialized cooperatives and small-scale agricultural enterprises. The bank promises that the customers will obtain a one-year loan ranging from 10,000 yuan to 5 million yuan in the short term, through the means of property mortgage,

third party guarantees and so on. The "property" can be agricultural machines, while the third party can be the government civil servants, teachers and grain traders. In addition, The Integrated Agricultural Service Center of P township will also help a scale farmer to apply for a loan from regular financial institutions. One scale farmer told me how easy it was for him to get a loan.

Once before, the banks had come to P township. Who need loans, they all knew and started with us. You can make a loan without any fee, what you need to do is to finish all the procedures \cdots the service is good. Now, more than one bank is asking me to apply for a loan. (Xu Jianguo)

If some people once hesitated to transfer land due to financial issues and agricultural operational experience, then the local government incentive policies indeed gave them some confidence. The scale farmer can not only get various types of government subsidies, but also gain free agricultural services. Under the active mobilization of the local government, the land circulation market in P township has flourished.

All in all, P township government carried out the land circulation work together with the opportunity provided by the national agricultural development projects. Based on the national policy, the local government made some institutional innovations and successfully explored an operational approach to promote land circulation. In order to ensure the standardization, transparency and legality of land circulation, the local government actively tested a platform and a set of procedures. Besides, the local government also actively mobilized the peasant households to transfer out their contract land and the various subjects of agriculture to rent these land. With the local government's considerable efforts, the land circulation market in P township has been successfully built up and brought prosperity. The situation of the two rounds of land circulation in the three villages can be used to explain the development of the land circulation market in P township. As mentioned above, at the beginning no one dared to transfer the land in the three villages in the first round of land circulation in 2008. Later, land was transferred out with the concerted mobilization work of P township government. The situation, however, changed at the second round of land circulation. At the end of 2015, there were already about 150 agricultural producers that had applied to transfer the land. There are more people than land in the market. The vice mayor of P township said: "At 2008, the land circulation market had not yet been formed. Now it is different, the land circulation market has formed. There are so many people that want to transfer land. So, we plan to collect the land guarantee deposit (to select the subjects of agriculture)".

Clearly, the local government played a key role in the formation of the land circulation market in P township. So, why did the local government facilitate the land circulation market so aggressively. There are mainly two reasons. The first one is that the land circulation can bring substantial project funds to P township. Since 2007, P township has received more than 350-million-yuan of project funds, which indeed is a huge amount of money for a poor agriculture township. Not only did the project funds promote the development of agriculture, but also played an important role in P township's infrastructure construction. The second one is that the promotion of land circulation is helpful to the officials' personal political future. Land circulation is an important way to promote agricultural modernization and increase the peasant households' income. If one can promote the land circulation smoothly and successfully, it is definitely a manifestation of one's work ability, which will be of great help to a person's political promotion. In 2003, the former director of Land Transfer Service Center of P township was removed up to the Finance Bureau of F County due to his outstanding work in land circulation.

With the active promotion of the local government, the low speed of land circulation among peasant households has been rapidly accelerated. The proportion of area of land transferred has expanded from 2% in 2007 to 57% in

2015, and the corresponding area of land has increased from 1,258 mu to 33,247.49 mu (Table 3.3).

Year	Area of land transferred (mu)
2007	1,258
2008	3,502.03
2009	11,133.38
2010	11,885.53
2011	14,158.77
2012	17,227.85
2013	26,294.71
2014	28,440.32
2015	33,247.49

Table 3.3 The area of land transferred in P township, 2007-2015

Data source: Sun, 2015 and author's own fieldwork.

The Rise of the New Subjects of Agriculture in Chinese Agriculture

Along with the rapid promotion of land circulation, the agricultural production in P township has begun to change: the old agricultural producers have declined, while the new subjects of agriculture begun to appear.

Different from the classic method that many scholars have used,⁷ the method adopted here takes the employment relation as the main differentiator, and takes into account the area of the land actually cultivated and farm capitalization at the same time. This classification mainly focuses on the "quality" differences on the

⁷This method usually adopted by scholars takes the land as main differentiator, supplemented with occupation, income and other secondary factors, to classify agricultural producers. There are mainly two drawbacks with this method. One is that it just revealed the "quantity" difference between peasant households, rather the "quality". In other words, it does not uncover the difference in social relations of production. The other one is that the types of producers identified by this method are isolated with each other. Thus, it will not be able to reveal the social and economic relations that exist within the structure of the rural economy.

level of relations of production among different agricultural producers. According to this classification, I distinguish four types of new subjects of agriculture, namely, capitalist farmers (CF), petty-capitalist farmers (PCF), medium-scale farmers (MF) and small-scale farmers (SSF) (Table 3.4).

	Capitalist	Petty-capitalist	Medium-scale	Small-scale
	farmers	farmers	farmers	farmers
	Farm size over	Farm size between	Farm size between	Farm size under
	300 mu, and	100-300 mu, and	30-100mu,	30 mu,
Means of	possessing large	possessing some	possessing small	possessing only
production	production tools	large production	production tools	small production
		tools	and a few large	tools
			production tools	
	Total reliance on	Mainly rely on	Mainly rely on	Total reliance on
Labor	hired labor	family labor, but	family labor, very	family labor*
		cannot do without	few hired laborers	
		some hired labor		
	A minor portion	A minority portion		
Distribution	of the wages of	of the wages of	The income of the	The income of
of products	hired labor, a	hired labors, a	peasant household	the peasant
of labor	major portion of	majority portion		household
	the income of	of the income of		
	farm owners	farm owners		
	A minor portion	A minority portion	A large portion to	All to meet basic
	to meet basic life	to meet basic life	meet basic life	life consumption.
Expended	consumption, and	consumption, and	consumption, and a	Can
reproduction	the major portion	a majority portion	small portion for	supplemented
	for expanded	for expanded	expanded	with wage
	productive	productive	productive	income
	consumption	consumption	consumption	

Table 3.4 Four types of new subjects of agriculture

*: An exception should be noted. Some elder small-scale farmers in P township sometimes also hire others to work on their farms because of their ages. But this type of hiring is essentially different from the ones of the former three types of farmers. The most significant difference is that the elder small-scale farmers do not hire labor with an expectation for expended reproduction, but to just replace their own labor.

Capitalist Farmers

Liu Min, aged 35, is the accountant of E village committee and the chairman of "Huinong Rice Cooperative" in E village. In 2012, he transferred 404.5 mu of land in E village with 400 jin of grain per year per mu for 10 years. There are five people in his family, including his parents aged over 60 years, his wife, and his daughter in elementary school.

Except for a harvester, Liu owns a complete set of production tools and agricultural machines. Although he owns a large tractor, he does not drive it by himself, rather he hires a driver. Liu manages his farm with his father's help, but they only engage in some important work, e.g. the water management, and the use of farm chemicals and fertilizers. Most of the physical work is handed over to the agricultural workers of whom there are five. Their wage is 120 yuan per day.

Liu mainly engages in wheat and rice production. In 2014, the production input cost of wheat was 398 yuan per mu (seeds 80 yuan, fertilizer 148 yuan, farm chemicals 100 yuan, harvesting 70 yuan); the gross income of wheat was 715 yuan per mu. The production input cost of rice was 504 yuan per mu (seeds 80 yuan, fertilizer 204 yuan, farm chemicals 200 yuan, harvesting 70 yuan); the gross income of rice is 1,523 yuan per mu. After subtracting the annual cost of 100,423 yuan for wages and 218,430 yuan for land rent, Liu can earn an annual net income of 220,000 yuan.

In the future, Liu expects to expand his farm. He noted that if his farm scale can reach to 800 mu, he will quit the job on the village committee, and devote himself to the farm management. In addition, Liu believes that the profit from the existing crop combination is limited, so he is planning to have a try at planting cash crops. The subjects of agriculture, such as Liu Min, whose farm scale exceeds 300 mu of land, mainly rely on agricultural workers to undertake the farm work. I call these Capitalist Farmers. By the end of 2015, there was a total of 31 CFs in P township. Although few in number, they actually control 21,939.48 mu of land, accounting for 37.83% of P township's total arable land. For the CFs, I mainly focus on two aspects: one is the growth of their operational scale; the other is the degree of capital intensification of their farms.

Table 3.5 shows that a growing number of land management rights have been concentrated into CFs' hands through the implementation of formal land circulation. To be specific, the number of the CFs increased from 2 in 2007 to 31 in 2015, while at the same time the land area involved increased from 885 mu to 21,939.48 mu. It is noteworthy that about 60% of the CFs' have a farm scale over 500 mu of land.

Table 3.5 The increase in the number of capitalist farmers and their farmsize, P township, 2007 to 2015

Year	300-	Over	Increase	Cumulative	Sub-	Increase	Cumulative
	500mu	500	number	number	contract	area	area (mu)
		mu			number	(mu)	
2007	2	0	2	2	0	885	885
2008	0	1	1	3	1	2,244.03	3,129.03
2009	1	7	8	11	5	5,814.68	8,943.71
2010	0	1	1	12	1	631.99	9,575.7
2011	1	2	3	15	2	2037.72	11,613.42
2012	2	1	3	18	0	2186.9	13,800.32
2013	4	4	8	26	2	4336.76	18,137.08
2014	1	1	2	28	1	1240.4	19,377.48
2015	2	1	3	31	0	2562	21,939.48

Data source: Sun, 2015 and author's fieldwork.

In order to explore the degree of capital intensification in CF farms, I made an

estimation of the capital input necessary to establish a capitalist farm. Take a farm with 300 mu of land as an example. The first input is the land rent. In 2015, the land circulation fee was 540 yuan per mu, then it needs 162,000 yuan to transfer 300 mu of land. The second input is the necessary agricultural production inputs, mainly including seeds, fertilizers and farm chemicals. In Liu Min's case, he needed to input about 300,000 yuan per year to run his farm with 404.45 mu of land. On this basis, I calculate that it needs at least 200,000 yuan to run a farm with 300 mu of land. The third cost is for production tools. Except the harvester, the following set of production tools are the basic needs to run a large farm: large tractor, small tractor, big sprayer, small sprayer, small spreader, pump, etc. These tools are conservatively estimated value of 100,000 yuan. Finally, the wages of the agricultural laborer. Take CF Xu Xiumin as an example, Xu ran a farm with 315 mu of land and relied mainly on the agricultural laborers. According to his estimation, he paid 60 yuan of labor cost per mu for wheat production and 80-100 yuan of labor coast in rice production⁸. The annual labor cost on Xu's farm is 40,000-50,000 yuan. In summary, one should invest at least 500,000 yuan to establish a farm with 300 mu of land. Therefore, the production scale of CFs is not only in the area of farm land, but more in the size of productive capital they require.

So, how did the CFs come into being? According to the source and the nature of capital, four approaches have been identified, namely, non-local non-agricultural capital (*Waidi feinong ziben*), local non-agricultural capital (*Bendi feinong ziben*), non-local agricultural capital (*Waidi nongye ziben*) and local agricultural capital (*Bendi nongye ziben*). To be specific, the non-local non-agricultural capital mainly includes private enterprise bosses, government officials, doctors, teachers, company staff, agricultural machinery dealers, etc.; the local non-agricultural capital is composed of the local garment workshop owners, village cadres, various

⁸But this estimation of labor cost should be low. From my survey, most of the scale farmers should put in labor cost 100 yuan per mu in wheat production and 150-200 yuan per mu in rice production.

store owners, labor contractors, grain traders, and so on; the non-local agricultural capital is mainly formed by tenant farmers coming from Chaohu, Anqing, Ma Anshan, and other places, who have already gone out to lease land in the early 1990s; the local agricultural capital is mainly some relatively rich "middle peasants", who have already transferred land from the villagers as early as 2007.

		The size		
Туре		300-500 mu	Over 500 mu	Total
Non-local non-	No.	4	16	20
agricultural	Area of land	1606.58	12590.23	14196.81
capital	Sub-contract	2	9	11
Local non-	No.	6	2	8
agricultural	Area of land (mu)	2552.05	4030.03	6582.08
capital	Subcontract	0	1	1
Non-local	No.	1	0	1
agricultural	Area of land (mu)	330	0	330
capital	Subcontract	0	0	0
Local agricultural	No.	2	0	2
capital	Area of land (mu)	830.59	0	830.59
	Subcontract	0	0	0
	No.	13	18	31
Total	Area of land (mu)	5319.22	16620.26	21939.48
	Subcontract	2	10	12

Table 3.6 The types of capitalist farmers

Data source: Sun, 2015 and author's fieldwork.

Table 3.6 shows that the 31 CFs in P township are composed of 20 non-local nonagricultural capital providers, 8 local non-agricultural capital providers, 1 nonlocal agricultural person and 2 local agricultural persons. Clearly, the main body of the CFs in P township is made up of non-agricultural capital, and mainly nonlocal non-agricultural capital. Therefore, the initial capital of the CFs does not come from capital accumulation in the agricultural sector, but from other nonagricultural fields, mainly the industrial and commercial sectors. By virtue of having adequate funds from the non-agricultural sectors, outsiders can be the first to seize a large number of land holdings in the land circulation market. That is why so many of the CFs lack the experience and management knowledge of agricultural production. In general, the CF's farms rely entirely on agricultural workers. Sometimes some family laborers will participate in the farm's daily management, but just as Liu Min's case shows, these family labor inputs are mainly to take care of some critical activities, while the physical work is all done by agricultural workers.

CFs are completely market-orientated agricultural producers, for whom the agricultural sector is just a business like in other industrial sectors. Their goal is to pursue maximum profit. To achieve this goal, they generally do the following practices. The first is to transfer-in more land to expand the scale of production, which is a form of lateral expansion. In P township, I found that many CFs keep expanding their land size in recent years, and the land was distributed in different villages. When I ask them why they did this, many of them answered that, even though our farming skill is poor, we still can earn hundreds of yuan per mu, so if we can earn 50,000 yuan by transferring in 100 mu of land, then we can earn at least 70,000-80,000 yuan, if not 100,000 yuan, when transferring in 200 mu of land. For this reason, these CFs have a strong urge to transfer land and expand the scale of operation. Different from this way, the second way is in the form of vertical expansion. This approach is manifest in the scientific farming and advanced management. In the survey, I came across several CFs, who conducted soil testing with their own money, chose the fertilizers and adjusted the usage of fertilizers in different plots of land. Besides, the CFs intended to enter into the upstream or the downstream of the grain industrial chain. By integrating a stretch of the grain industrial chain, they try to gain greater returns. The strategy of capital accumulation will be discussed in detail in chapter 6.

I also found that some CFs continued to transfer-in land but not to operate it by themselves, but to subcontract it to other producers and earn some rent. Table 3.6

reveals that there are 12 CFs subcontracting land, 10 of them transfer more than 500 mu of land, in a total of 31 CFs. In general, the subcontracting fee in P township is 80-100 yuan per mu. Besides, they also can obtain 60 yuan per mu of government rewards. So, these CFs can gain 140-160 yuan per mu without doing anything. Obviously, these CFs adopted a non-capitalist profitable way, virtually as the landlord.

On agricultural production has its own limits, thus some scholars (Sun, 2015:115) argue that the low profit and failure of some SFs is mainly due to their overly large scale. In my opinion, this explanation is clearly insufficient, which can be proven by unfolding the subcontract history. On Table 3.5, we can find that the cases of second-hand subcontract land mainly happened before 2012, especially in 2009, which marks the early stage in the rapid rise of the land circulation market in P township. From 2007 to 2012, these emergent CFs have not found a suitable crop structure and appropriate farm management style. However, when they finally did later, most of the CFs chose to operate the land by themselves and abandoned the subcontracting way. That is why, there are only 3 cases of subcontracting holdings after 2012. Therefore, the CFs adopted subcontracting, a non-capitalist profitable way to make a profit, not because of their large farm scale, but because of the relatively fragile state of the capitalist economic element they represented at that time, which led them to take this non-capitalist and circuitous way to consolidate their economic status.

Undoubtedly, these CFs are agricultural capitalists relying on agriculture workers and adopting capitalistic agricultural production. With respect to the backward peasant economy, they certainly are the typical representatives of the advanced capitalist agricultural production system in its economic form. Their rise and steadiness also shows that capitalist agricultural production already has a considerable presence in the rural economy of P township.

Petty-capitalist Farmers

Zuo Shunyong, aged 44, is the head of a three-member family. His family owns 10 mu of land, which has been transferred out. In 2005, Zuo operated 184 mu of land, which he rented at a price of 400 jin of grain per mu per year. The term of the contract is 8 years, from 2009 to 2016. Before transferring the land, Zuo was a bus driver. When seeing the great support for agriculture by the state, he decided to transfer the land and to do farming.

Except for a harvester, Zuo owns a large tractor, a small tractor and a set of complete production tools, which he bought in 2010. Zuo and his wife both engage in the daily management of their farm, but they still need to hire agricultural workers. In 2014, they hired 71 gongs⁹ of workdays, in which 27 gongs in wheat production and 44 gongs in rice production.

In 2014, the total production cost of wheat was 328.5 yuan per mu, including seeds 80.5 yuan, fertilizers 116 yuan, farm chemicals 62 yuan, and harvesting 70 yuan; the gross income of wheat was 660 yuan per mu. The total production cost of rice is 480 yuan, in which seeds cost 35 yuan, fertilizers 200 yuan, farm chemicals 175 yuan, and harvesting 70 yuan; the gross income of rice was 1,550 yuan per mu. Besides, the annual labor cost was 7,810 yuan and land rent 99,360 yuan. Thus, the annual net income of Zuo is about 150,000 yuan.

Zuo is quite satisfied with the land circulation policy of P township. When the land circulation expires in 2016, he still expects to transfer land and he is confident of it. What he is worried about is the land guarantee deposit. He argues that this policy should only aim at the non-locals, rather than the locals.

⁹ "Gong" is a unit of workday, which usually equals to 8-10 hours.

I call people like Zuo Petty-capitalist Farmer: their farms mainly rely on family labor, but they cannot do without agricultural workers; the scale of their farms is between 100-300 mu of land in general. From the statistical data of P township government, there were about 66 PCFs in P township by the end of 2015, of which the farm scale of 45 PCFs' was between 100-200 mu, and 21 PCFs' between 201-300 mu. The total area they cultivated was 11,308.01 mu (Table 3.7).

Year	100-	201-	Increase	Cumulative	Sub-	Increase	Cumulative
	200	300	number	number	contract	(mu)	area (mu)
	mu	mu			number		
2007	1	1	2	2	0	373	373
2008	0	0	0	2	0	373	373
2009	6	3	9	11	7	1,816.67	2,189.67
2010	1	0	1	12	1	120.16	2,309.83
2011	0	1	1	13	0	235.52	2,545.35
2012	3	2	5	18	0	882.18	3,427.53
2013	18	9	27	45	5	4,730.1	8,157.63
2014	6	1	7	52	0	905.21	9,062.84
2015	10	4	14	66	0	2,245.17	11,308.01

Table 3.7 The increase in the number of petty-capitalist farmers and theirfarm scale

Data source: Sun, 2015 and author's fieldwork.

Similar to CFs, the PCFs also have a complete set of production tools; the degree of their farm capitalization is also relatively high; they are also producers highly dependent on agricultural markets, either the products market, or the market of factors. The most important is that the PCFs have a similar inherent logic with the CFs, namely, farming maximize profits; and they often employ agricultural workers. It is in this sense that I argue that the operation of PCFs is capitalist in nature. The PCFs can also be identified in four types. There are 5 PCFs that are based on non-local non-agricultural capital, 27 are local non-agricultural capital, 9 are non-local agricultural capital, and 25 are local agricultural capital. So,

different from the CFs, the PCFs are mainly locals of P township.

There also exists the subcontracting issue in PCFs. Table 3.8 shows that there are 12 PCFs subcontracting the land, including 3 cases of non-local non-agricultural capital, 8 cases of local non-agricultural capital, and 1 case of local agricultural capital. For the subcontracting issue in PCFs, I also regard it as a relatively slow and non-capitalist way of accumulation. The agriculture producers who take over subcontracted land (also including the land CFs subcontracted) and operate it are mainly based on non-local agricultural capital, that is, the non-local tenant farmers from Chaohu, Anqing, and Ma Anshan. Because the land was subcontracted informally, many non-local tenant farmers did not show up in the statistics of the P township government.

		The size		
Туре		100-200 mu	201-300 mu	Total
Non-local non-	No.	2	3	5
agricultural	Area of land	362.1	758.27	1120.37
capital	Subcontract	2	1	3
Local non-	No.	20	7	27
agricultural	Area of land (mu)	2,742.71	1,681.72	4,424.43
capital	Subcontract	7	1	8
Non-local	No.	7	2	9
agricultural	Area of land (mu)	1157.95	520.59	1678.54
capital	Subcontract	0	0	0
Local	No.	16	9	25
agricultural	Area of land (mu)	2,010.12	2074.55	4,084.67
capital	Sub-contract	1	0	1
	No.	45	21	66
Total	Area of land (mu)	6,272.88	5,035.13	11,308.01
	Subcontract	10	2	12

Table 3.8 The types of petty-capitalist farmers

Data source: Sun, 2015 and author's fieldwork.

The main support of the PCFs is the non-local agricultural capital and the local

agricultural capital. Although the number of the former is more than the latter one at the current time, I forecast that this situation will change in the second round of land circulation in P township. The main reason is that many local peasant households, especially the original middle peasants, who did not transfer the land in the first round, are evidently preparing money to transfer in land in the forthcoming second round of land circulation. While having noticed this tendency, many non-local tenant farmers have ready gone to other places to transfer land. Therefore, I argue that there will be more PCFs with local agricultural capital backgrounds in the second round of land circulation. This forecast was confirmed in April 2016 when I came back to P township.

PCFs have a great tendency to accumulate capital. In the interview, when being asked whether or not to transfer land or expand their production scale continually, most of the PCFs answered 'yes'. As mentioned above, the powerful CFs also sought to expand their farm scale, so the comparatively weak PCFs have to find another way. One way is to take an intensive management approach, that is, planting cash crops, like watermelons, vegetables, etc. However, this way not only has a capital threshold, but also technical barriers, so not every PCFs will choose this way. Another way is the diversification of the grain crops. The advantages of this way are the reduction in the numbers of agricultural workers, and the increase in the output value. This is something that will be discussed in detail in chapter 6.

It should be noted that the PCFs are still confined under the label of "family business". Although agricultural workers are needed in the daily management of the farm, the family labors are still involved in the physical labor. From the survey, the family labor input can account for about half of the total labor input in the farm, if there are two family members putting time into the farm production. But if just one family member is involved, then the proportion of the family labor input will be less than half of the total labor input in the farm. It is this distinction that the PCFs cannot be considered as agricultural capitalists in a full sense. Rather, the PCFs are the budding CFs, that are an intermediate or transitional form of agricultural production changing into capitalist production.

In sum, the CFs and PCFs are the main land renters in the land circulation market in P township. Although both are land rentals, land rental in contemporary China is different from the feudal days, which can be called a "reversal of rent" (Harriss-White and Gooptu, 2001: 96). That is, the land was leased to a large number of small peasants from a few landlords in the feudal era, while today the land is transferred from a large number of peasant households to a few agricultural producers. Although the role has changed, the peasant households as the "landlords" are still in a weak position, which I have discussed in the chapter 2. In contrast, the CFs and PCFs as the "tenants" are in a dominant position. Verdery effectively called them "supertenants":

"They rented owners' land from a position of advantage, thus differing from the more common agricultural tenant because they had so much more social and cultural capital than the owners. Their peculiar situation arose from the peculiar *rentier* society de-collectivization had created: instead of many tenants seeking land from a few large owners, we have many owners and few tenants. I call them *supertenants* to indicate that even though they rented means of production belonging to others, their social situation was superior to that of their lessors". (Verdery, 2003: 195)

As new subjects of agriculture, the capitalist farmers and petty-capitalist farmers own far more powerful economic strength than the peasant households. They also obtain considerable support from all levels of government. They are the leaders in the capitalist agricultural production system.

Medium Farmers

Yang Jie is 44 years old, and is the head of a family of 4 members. Yang cultivated about 55 mu of land in 2015, in which 3 mu was his own contracted land, and another 52 mu had been spontaneously transferred from peasant households. The land rent he paid was 300 jin of grain per mu per year. This land circulation was based upon oral agreement, so the term of the transfer is not fixed. Yang has cultivated the land for 4 years. In 2015, Yang planted 40 mu of wheat/medium rice and 15 mu of double cropping rice.

Yang owns a large tractor and a harvester. Yang bought his first harvester in 1994. The new one was bought in 2014, which cost him 90,000 yuan. The large tractor was also bought at 2014, and cost about 30,000 yuan. These two large agricultural machines are mainly used to provide services to other farms. According to a rough estimation, the hire of these two machines can bring him about 55,000 yuan per year on average. The management of the farm mainly relies on Yang and his wife, but still needs some agriculture workers in the busy seasons. In 2014, they hired agricultural workers for about 20 gongs of work days. Since Yang owns a harvester and a large tractor, he does not need to buy machinery services. This makes his farm's income relatively high. In 2014, the income from farming was 60,000 yuan. Therefore, Yang annually receives about 115,000 yuan in revenue.

Yang feels dissatisfied with the land circulation policy in P township. He states that it will finally lead to a situation that "the rich people get much richer, while the poor people get much poorer". As for his future plan, Yang expects to be able to transfer in more land to expand his farm.

The subjects of agriculture such as Yang can be referred to as Medium Farmers: their cultivated area is between 30 -100 mu of land; the farm operation mainly

relies on family labor, while he still needs to hire some agricultural workers in the busy seasons. In P township, MFs plant various crops, including the double cropping rice, wheat and the medium rice. In general, the early rice will be left to meet the family's grain ration needs, while the medium rice, late rice and wheat will be sold directly to the grain traders for cash income. So, the MFs are also market-orientated commodity producers. For the MFs, the purpose of production is also to gain maximum profit and input the surplus into expanded reproduction, which is not fundamentally different than the CFs and PCFs.

Most of the MFs exist in the villages where formal land consolidation has not yet been carried out. Due to the land fragmentation in these villages, the CFs and PCFs do not want to transfer the land, which provides greater opportunity for the MFs. One MF told me,

Here, the fields have not yet been consolidated. In the southwest area of the S river, many fields also have not been consolidated. While in the east area of S river, all the land has been consolidated. The 'big households' have not entered into the west area of S river because the plots of land are not neat. So, the agricultural producers like us can still find some fields to cultivate. (Zhu Hong)

Of course, this is not the only way for the MFs to obtain land. The MFs will also make some strategies to get more land. That's why only small number of the MFs appear in the villages where the land has been consolidated. This will be further discussed in chapter 7.

The biggest difference between MFs and the former two types of new agriculturalists is the source of farm labor. Farming of the MFs is mainly done by family labor, usually a couple, who only need a help from hired agricultural workers during the busy season. On average, the MFs need to hire agriculture workers for about 40 gongs work days annually. Another distinction is that MFs

transfer the land spontaneously from the peasant households, which results in the dispersion of their farms, e.g., Yang's farm has been divided into three parts. The reason for adopting this way to transfer the land is the relatively lower land rent, which in general is between 200-300 jin of grain per year per mu. With the lower land rent and the input of family labor, the MFs that cultivate 50-60 mu of land can approximately obtain 50,000-yuan annual income.

Most of the MFs have actually evolved from the previous middle peasants. After 2007, the local government began to intervene in land circulation, the original middle peasants suffered from the impact and have been differentiated. With the promotion of the land consolidation projects and the increase in the land rent, 1) many middle peasants lost their land and became small-scale farmers. This is the case with Yang Zhongliang of E village, he rented land before 2000, and still cultivated 52.4 mu of land in 2010. But with the promotion of the land consolidation projects, he lost the land in 2012, and now he is managing a small farm with 15 mu of land. 2) a very small number of the middle peasants successfully transferred land through the land circulation market and changed into PCFs or CFs by virtue of their savings or money borrowed. For example, Qian Jinyang of B village was already cultivating 30 mu of land in 1999. After the land consolidation, he rented 120 mu of land in 2012, and then rented another 83 mu of land in 2013. He has successfully transformed into one PCF. 3) A number of middle peasants survived and transformed into MFs. They survived for different reasons. One is due to the fact that agricultural projects have not spread to their villages and their land. Another one is that they have successfully seized the opportunity arising from the agricultural machine services market. So, some of the MFs not only cultivate the land, but also provide agricultural machine services to other agricultural producers in the area.

Thus, the MFs can further be divided into three sub-groups: 1) Low-medium farmers. They only engage in agriculture production; the scale of their farms is

between 30-60 mu of land in general, and they can obtain an annual income of about 30,000-50,000 yuan. 2) Mid-medium farmers. This sub-group includes two types of people: one only engaged in agriculture production, but the scale of their farms is between 60-100 mu of land; the other one only provides agricultural machine services. They both have annual revenue of 50,000-100, 000 yuan. 3) Upper-medium farmers. They not only engage in agriculture production, but also provide agricultural machine services. Their annual income is more than 100,000 yuan in general. These three sub-groups have different prospects. To be specific, the low-medium farmers are constantly declining, and eventually they will become small-scale farmers. The mid-medium farmers can maintain their current status. The upper-medium farmers are constantly rising, and they can gradually transfer in land and become PCFs or CFs through capital accumulation.

For the MFs owning a harvester or a large tractor, the purpose for them to buy these large agricultural machines is not just to meet the needs of their own farms, but more to sell agricultural machine services. In general, a large tractor can plow about 400 mu of land on average in one season. Calculated at 50 yuan per mu on average, the annual gross income of a large tractor is about 40,000 yuan. A harvester can reap 500 mu of land on average in one season. Calculated at 70 yuan per mu, the annual gross income of a harvester is about 70,000 yuan. After subtracting the cost of oil, mechanical losses, and depreciation, the MFs owning a large tractor and a harvester can obtain an annual income of 70,000 yuan. This revenue can not only meet the MFs' own reproduction, but also can provide some surplus for expanded reproduction. That's why some MFs in P township have capital to continually upgrade their agricultural machines, or transfer in land.

However, the large machines are not cheap. Without a government subsidy, the price of an ordinary large tractor is about 100 thousand yuan, while a harvester is usually worth 150 thousand yuan, some imported ones even cost up to 200 thousand yuan. Obviously, it is not a small amount of money to the peasant

households in P township. Actually, the purchase of the large agricultural machines is a kind of investment for some MFs. They buy these large agricultural machines and get a return through selling the agricultural machine services. In addition, even if someone has the money to buy large agricultural machines, they may not have the specialized expertise to operate the large machines. In the aspect of operation, the large machines obviously are harder than the small ones, which provides a technological advantage to some MFs. In this sense, I argue that due to the above two reasons, the MFs with large agricultural machines, usually the mid- and uppermedium farmers, have become an important force in the agricultural production of P township.

Small-scale Farmers

Fu Xuefu, aged 59 years old, is the head of a family with 6 people. This household is a typical "left behind household" (*Liushou jiating*). The first son and his wife are working in Sichuan province, while the second son is working in Shanghai. The Fu couple stay at home taking care of their little granddaughter, and cultivating 6.6 mu of contract land. The daily management of the farm is mainly done by Fu himself, while his wife will give a hand during the busy season. Fu told me, he will continue to farm the land by himself as long as he still can move; if not, then he will transfer it out.

The most valuable production tool Fu owns is a small tractor bought in 1998. The other tools are the most basic small production implements, including 2 manual sprayers and 2 small water pumps. Thus, he needs to buy harvesting services in the harvest time. He plants the double cropping rice. In 2014, the total cost of the early rice is 276 yuan per mu, including 166 yuan for fertilizers, 30 yuan for herbicides, and 80 yuan for harvesting. The total yield of early rice is 6,600 jin on average, in which 3,000 jin is kept for self-consumption and the other 3,600 jin sold. The net income of the early rice is 2,678 yuan. The total cost of late rice is 486 yuan per mu, in which the seeds cost 60 yuan, fertilizers cost 180 yuan, and the harvesting costs 80 yuan. The total yield of the late rice is about 7,920 jin. The late rice is all sold, which can bring him a net income about 8,355 yuan per year. So, this 6.6 mu of land can bring Fu about 11,033 yuan of annual income.

Besides the farming, Fu also has a job in a grain processing plant in his home village. The wage is 100 yuan per day. Fu can earn about 2,000 yuan every month, and about 20,000 yuan the whole year. Every year, Fu also plants a small plot of cotton. In 2015, he harvested about 20 jin of cotton. In addition, Fu also owns a small vegetable garden, which basically can provide the family with daily consumption of vegetables. Fu's wife also raises a few chickens and ducks.

I term the subjects of agriculture like Fu as Small-scale Farmers, who cultivate less than 30 mu of land, and depend entirely on family labor for farm production. In terms of numbers, SSFs are certainly the majority, but in terms of economic scale, they are no longer the majority. The name "small-scale farmers" mainly contains two meanings: first, they operate small-scale farms, but the income from the small farm is not sufficient to sustain life; second, they must sell their labor, or engage in other sideline businesses (Yu, 1983 [1935]:165).

In usual, SSFs plant double cropping rice in P township, because it can not only bring the maximum benefit to them, but also meet their family grain ration needs. Although the SSFs can be self-sufficient in grain and vegetables, they cannot conceal the fact that they have already transformed into commodity producers. Due to different qualities, the price of late rice is higher than the early rice. So, the SSFs in P township usually leave the cheap early rice and sell the relatively higherpriced late rice in order to get more cash. The SSFs own the basic set of small production tools, but no machines. Similar with the above three farmer groups, SSFs also need to buy harvesting services, but the price paid is much higher.

It should be noted that the SSFs have not been included in the NSAs by the state and many scholars, who still see them as "small peasants" that existed at the beginning of the reform. However, as mentioned above, the original small peasants have experienced a rapid collapse under the impact of land circulation. Today's SSFs are just a new type of agricultural subject appearing with the collapse of the small peasants. After the land circulation, a clear differentiation of small peasants in P township has occurred: about 70% of the small peasant rented out all or a part of their contracted land; about 20% still chose to cultivate their own contracted land; and 10% rented a small amount of land.

The 70 % small peasants transferring out land can be divided into two parts: one is the peasant households working outside permanently. They have already transferred some lands to the middle peasants before 2007 with a land rent of 100-200 jin of grain per mu. Now the land rent per mu has risen to 400 jin of grain, thus naturally they are still willing to transfer-out their land. These peasant households are the main providers of land in P township. Another one is the peasant households that rent out the land under the mobilization of village cadres. A small number of these peasants quit the agricultural sector due to their age, while a significant minority of these peasants became agricultural groups to sell their labor.

Twenty per cent of the small peasants still cultivate their own contracted land. Most of them, aged between 50-70 years old, find it very difficult to find a job in the urban areas. So, they like to cultivate their contracted land by themselves, rather than transfer it out. According to my field data, their actual cultivated land area is about 9.88 mu on average, and the annual income is about 10,000 yuan. Obviously, this income is unable to meet the needs of simple reproduction, thus they have to find ways to sell their labor locally. Usually, the annual wage income is about 15,000-20,000 yuan. Overall, the annual income of these peasant households is between 25,000-30,000 yuan, in which the larger proportion is wage income.

The remaining 10% of the small peasant lease-in a small amount of land mainly from relatives, neighbors and friends. According to my fieldwork, their actual cultivated land area is about 20 mu on average, which can bring them an annual income of 20,000-25,000 yuan. Some of them occasionally sell their labor in other agricultural producers' farms, which can bring them about 5,000 yuan each year. Therefore, their annual total income is between 25,000-30,000 yuan, in which the main part is agricultural income.

The SSFs defined here are mainly the latter two types of small peasants. On the one hand, they continually engage in agricultural production in their small plots of land. In addition, they sell their labor to the farms of the above three subjects of agriculture. Although today's SSFs are still somewhat similar in form with the original small peasants, their nature and subjectivity are totally different. These SSFs themselves are not agricultural producers with capitalist inclinations, but they are not external to the capitalist production either. Rather, they are an important part of the capitalist agricultural production systems in P township. In fact, if there is no land and labor provided by SSFs, the rise and development of the capitalist production in P township will not go so smoothly. The land and labor providers are the structural roles to the SSFs in the current system of agricultural production.

Estimation of Proportion

The next question regards the respective proportions of the NSAs in P township. It is a very important question. By providing an answer to it, I can judge which form of agricultural production holds the dominant position in P township's agriculture. Here, I am mainly concerned about the numbers of these subjects and the land they occupy.

For the CFs and the PCFs, their numbers and the land they cultivate are known. However, there is a lack the reliable data about the MFs and SSFs. This is not only due to the P township government's lack of statistics, but also the local village cadres are not clear about the specific situation regarding the spontaneous land circulation among peasant households. I therefore present some estimates based on information collected in the field.

Village	Land transferred	Total area of	Proportion of land transferred
	(mu)	land (mu)	in total area (%)
Ι	3,603.43	4000	90.1%
K	4,312.6	5000	86.3%
G	3,899.12	5000	78.0%
J	3,572.58	5000	71.5%
Н	2,076.86	3000	69.2%
М	2,670.21	4500	59.3%
Е	1,972.05	4000	49.3%
D	1,442.4	3000	48.1%
L	1,950.96	4300	45.4%
F	1,933.5	4500	43.0%
С	2,114.39	5000	42.3%
А	1,876.02	5000	37.5%
В	1,823.37	5000	36.5%

Table 3.9 The areas of land transferred and the corresponding proportionsestimated for each village in P township

Data source: Author's fieldwork

According to the proportion of land transferred in Table 3.9, I divided the villages

into three groups. The first type includes villages with the highest proportion of land circulation, including five villages, I, K, G, J, H. The second type of villages are those with relatively high proportion, comprising six villages, M, E, D, L, F, C. The third group includes villages with a low proportion of land transferred, including villages A and B.

Looking at the first group of villages. Only about 600 mu of land has not been outflow in K village, in which about 320 mu was been cultivated by 8 MFs, and 280 mu was been cultivated by 35 SSFs. In G village, about 1,100.88 mu of land has not been transferred. After the land consolidation, there was basically no MFs in G village. I only encountered one in my fieldwork. But there are still about 140 SSFs, who cultivate 7.5 mu of land on average. In H village, there are 3 MFs cultivating 50 mu of land on average, and about 130 SSFs cultivating 6 mu of land on average. With this deduction, I estimate that there are about 30 MFs and 500 SSFs in the above five villages.

In the second type of villages, I take E and D villages as examples. There are still about 2,000 mu of land that has not been transferred, in which about 650 mu is cultivated by 15 MFs, and about 1,300 mu cultivated by 130 SSFs. In D village, there are about 10 MFs cultivate 50 mu of land on average, and about 200 SSFs, who on average cultivate 5.5 mu of land. Based on this calculation, I estimate that there are about 120 MFs and 1,250 SSFs in these six villages.

The A and B villages have the lowest proportion of land circulation. In A village, about 3,123.98 mu of land has not yet been transferred. There are about 25 MFs, who on average cultivate 50 mu of land each, and 210 SSFs, whose farm scale is about 9 mu on average. The situation in B village is similar. Therefore, I calculate that there are about 50 MFs and 550 SSFs in these two villages.

According to the above estimation, the proportions of the four types of NSAs in P 135

township are listed in Table 3.10. From this table, we can see that the distribution of land management rights in P township form a significant polarization. The capitalist farmers accounting for 1.19% of the total number of subjects of agriculture, manage 37.83% of the total area of land in P township. The petty-capitalist farmers with 2.54% of the total number of subjects of agriculture occupy 19.5% of the land management right. The medium farmers are relatively modest, with the proportion of 7.7%, holding 15.69% of the total land. Although the small-scale farmers account for 88.56% of the subjects of agriculture, they only cultivate 26.68% of the land in P township. The capitalist farmers and petty-capitalist farmers together control 57.33% of the whole land in P township, which is sufficient to say that the capitalist farmers and petty-capitalist farmers have already a dominant position in P township's agricultural production. No doubt, the above estimation is rough, but the conclusion is reliable since there are detailed data of the capitalist farmers and petty-capitalist farmers.

Туре	No. holdings	Proportion of all farmers	The average area of cultivated land per holding (mu)	The total area of cultivated land (mu)	Proportion of total area of land
CFs	31	1.19%	707.73	21,939.48	37.83%
PCFs	66	2.54%	171.33	11,308.01	19.5%
MFs	200	7.7%	45.5	9,100	15.69%
SSFs	2300	88.56%	6.73	15,475	26.68%

Table 3.10 The numbers, areas of farm size and the proportion of the fourtypes of new subjects of agriculture in P township in 2015

The above identification of the four types of NSAs is just a static description, but it is enough for us to understand the changes in the relations of production and in the internal structure of the peasant economy. The two dynamics of agricultural capitalization, the industrial and commercial capital coming from beyond the countryside and the peasant differentiation inside the countryside, are rapidly changing the relations of production in agricultural production of P township. After land circulation began formally, the original relatively homogeneous small peasant has been replaced by four types of new subjects of agriculture: 1) Capitalist farmers are the leaders of the capitalist agricultural production system in P township. They rent the largest amounts of land and hire agricultural workers to operate the capitalist production system. 2) Petty-capitalist farmers are another leader in current P township's agricultural production structure. They also rent a large amount of land and the operation of their farms cannot be done without agricultural workers. 3) Medium farmers did not rent so much land as the above two farmer groups, but they hold another important means of production -- large agricultural machines. It is by virtue of their possession of agricultural machines that medium farmers have become an indispensable and important force in the agricultural production in P township. But it should be noted that the medium farmers are experiencing constant differentiation. 4) Small-scale farmers are no longer the small peasants at the beginning of reform, but one of the new subjects of agriculture. They are numerous, but they are in a subordinate position in the economic sense. The small plots of land they farm cannot meet their simple reproduction needs, so they have to sell their labor to earn some money. This is the basic information about the four types of new subjects of agriculture and their structural positions in the capitalist agricultural production system of P township.

Summary

This chapter mainly explores how the collapse and differentiation of small peasants has been accelerated by the promotion of formal land circulation, and how the mode of production itself has been capitalized.

If the implementation of national agricultural development projects provided the "hardware" conditions for the land circulation in P township, then the establishment of the institution, platform and the introduction of policies prepared the "software" conditions for land circulation. The government in P township actively promoted land circulation while following the national policies on the one hand, and on the other hand, taking into account its own interests. Therefore, more than half of the agricultural lands in the study area have been circulated in less than 10 years.

Undoubtedly, formal land circulation accelerated the collapse and differentiation of small peasants. Four types of new subjects of agriculture have emerged. The dominant position of the small peasants has been replaced by the capitalist farmers and petty-capitalist farmers. They rent a large amount of land in the formal land circulation market. Although few in number, they control a large proportion of the land. They can be called "supertenants". They grab the surplus value from agricultural workers and input it into expanded reproduction. They are the representatives of the capitalist mode of agricultural production. While the smallscale farmers still engage in agricultural production, the small plots of land they farm have been insufficient to meet the simple reproduction needs of the family. So they have had to sell their labor to earn wages. In this regard, although the production mode of the small-scale farmers is still the peasant family farming, they definitely have been incorporated into and largely transformed into a subordinated part in the capitalist production system in P township. The medium farmers located in the middle status are still in the process of differentiation. A small number of mid- and upper-medium farmers are trying to transform into agricultural producers with capitalistic intentions, while the relatively larger number of low- medium farmers have had to sell their labor to maintain the simple reproduction of the family, just like the small-scale farmers. This is a new picture of the agricultural production in P township after land circulation, which to a large extent is also the new picture of contemporary China's agricultural production.

Chapter 4: An Emergent Farm Labor Market

If the land concentration is an important prerequisite for the development of capitalist agriculture, then the emergence of a supply of agricultural workers is another important prerequisite. In this chapter, I will explore the agricultural workers' issue in P township's agricultural production. Here, the term "agricultural worker" is defined as the hired laborer engaged in farm work, whether permanent, casual, or seasonal.

In China, the agricultural worker is not a new phenomenon. In fact, the agricultural worker had already emerged shortly after the de-collectivization (Zhang, 2015:290; Chen, 2015:84), and some scholars have long been concerned about it (She & Huang, 1982; Du, 1988; Rong et al., 1989). Although the agricultural worker is not a new phenomenon, the large-scale emergence of agricultural workers is indeed a new and remarkable event in recent years. However, this new phenomenon in China has been invisible, which mainly results from the following two reasons. Firstly, hired wage labor in agriculture is not captured in official statistics. Huang and his partners have already argued that, "as for those still in farming, officially dubbed 'people employed in agriculture', 'hired agricultural worker' ... do not exist as a statistical category" (Huang, Gao and Peng, 2012:4). The invisibility in official statistics makes the number of agricultural workers and the phenomenon itself undervalued and neglected. Secondly, and more importantly, the ignorance in "sannong" academia. On the one hand, it "refers to the idea of 'uncaptured peasantry', that is, the persistent ability of the 'peasantry' to resist capitalist penetration" (Oya and Pontara, 2015:35). Proponents of this view are mainly the pro-peasant scholars. They argue that the peasant economy has a strong vitality and self-regulating capabilities, so even under capitalism dominated situations, peasant economies can still graft onto the capitalism system successfully and maintain their own reproduction. In fact, many small peasants are

actually disguised forms of wage laborers, as Banaji (2010) has noted. On the other hand, some scholars' ignorance to the agricultural workers originates from their neglect of the peasant differentiation issue. In their view, the peasantry is still regarded as a relatively homogeneous group. Whether "big households" or the small peasants, both are seen as "peasant". The most typical representative of this view is the statement of "more than 200 million peasant households, more than 600 million rural populations" (He, 2015).

Recently, some scholars have begun to pay attention to the large-scale emergence of agricultural workers. Zhang and Donaldson appear to be the first scholars to pay attention to this new phenomenon. When they explored the relations between agribusiness and peasant households, they note three types of agricultural workers, that is, semi-proletarian with Chinese characteristics, semi-proletarian farm workers and proletarian farm workers (Zhang and Donaldson,2008). Differing from these two scholars, Huang and his partners described a more systematic picture using existing data in China. Analyzing the Compilation of National Agricultural Product Cost and Profits, they tried to estimate the proportion of the wage labor in the total labor input in Chinese agriculture. Combined with other statistics, they ultimately concluded that "hired agricultural year-workers in China today total only 3 percent of all labor input in agriculture (and short-term workers another 0.4 percent)" (Huang, Gao and Peng, 2012:1). But this estimated data, methods and conclusions have been questioned by other scholars. Zhang Qian doubts the reliability of the data itself. He argued that it is impossible for "the family labor input to be accurately reported in surveys". Besides, he claimed that since the averaged-out data of hired labor input conflates different types of wage labor use, "the number of people involved in wage work in agriculture as a proportion in the total agricultural labor force will definitely be much larger than the estimated percentage of hired labor in total labor input" (Zhang, 2015:291). Yan and Chen (2015) were even more critical. They argued that the calculation method adopted by Huang and his partners actually reduces the proportion of hired

laborers, because they include the peasant households with no wage laborers into the denominator. Through the data on the "family farm" released by MOA, it is argued that "these family farms have a much higher rate of wage labor use – about 28 per cent of the total labor in 'family' farms, excluding employment of shortterm labor", which "indicates that the use of wage labor is much more present on large-scale farms" (Yan & Chen, 2015:383).

Seemingly, these scholars are just in conflict on a figure issue, which is so important that "its present character and scale are indicative of a far-reaching transformation in the countryside: a change to new production relationships" (Berman, 1978:42). In this sense, I claim that the increase of large-scale hired wage labor in agriculture is very closely bound up with the development of capitalist production in rural China. During this process, the most significant characteristic is that the hired wage laborer has replaced the family labor as the dominant labor force in agriculture, which has changed the previous mode of agricultural production in China.

Scholars have been concerned about the large-scale emergence of agricultural workers and the profound transformation associated with it. However, they neglect the description and discussion of the new emerged farm labor market in rural China, including details on origin of the employers and employees, the recruitment, wages, working hours and so on. Based on the above research status, this chapter intends to make a detailed description and discussion of China's farm labor market based on the example of P township. There are four sections in this chapter. First, the issue of the formative mechanisms of the farm labor market will be explored. Second, the working conditions, wages, recruitment and other aspects of labor will be introduced with the types of agricultural workers as the main focus. Third, I will probe into how the laborers are bypassed by capitalist agriculture. Finally, the key characteristics of China's farm labor market will be presented based on the above discussion.

Peasant Differentiation and the Formation of Farm Labor Market

Bharadwaj (1989:1) argues that "a study of the process of formation of labor market entails an analysis of the interaction between the strategies of survival of households whose economic condition compels a dependence on selling their labor and the strategies that the surplus appropriators adopt". Clearly, we need to know who buys labor power and who sells their labor power, when exploring the formation of farm labor market. Besides, Oya (2010:24) argues that we should "underscore the importance of understanding the nature of rural labor market formation, their dynamics and links with inequality or processes of socioeconomic differentiation". It is a homogeneous peasantry that has been differentiated into different groups of people that has to sell their labor power to maintain a subsistence. while someone has the money to buy their labor power. Lenin (1977[1899]:172) also stated that "the most elementary requirements of economic statistics" should not be forgotten, "namely, that a strict distinction be drawn between employers and wage-workers, regardless of the form of land tenure that unites them, and regardless of the multiplicity and variety of the intermediary types between them".

In chapter 3, it was argued that the original small peasants have been differentiated into four types of NSAs. I interviewed 80 different types of NSAs, whose basic information is presented in Table 4.1. Next, I will explore the composition of the laborers in the four types of NSAs' farms (Table 4.2).

Table 4.2 shows that, 1) the proportion of the hired laborers in the total labor input amounts to 78.56% on the CFs' farms, which means that the CFs mainly rely on hired laborers to run their farms. 2) The PCFs' farms mainly rely on family laborers

(60.45%), but cannot run without hired laborers (39.55%). 3) The MFs and SSFs' farms rely heavily on family labor, and need only a very small amount of hired laborers in the busy season. Beyond doubt, the proportion of the hired labor is the most critical factor in determining the nature of the NSAs. Thus, from the data in Table 4.2, I argue that CF have a capitalist nature in the full sense, the PCFs are half-capitalistic, while the MFs and SSFs are non-capitalistic in nature. In this sense, we know that it is the CFs and PCFs that buy the bulk of the hired labor. But, who sells their labor?

NSAs Number Average farm size Total land area (mu) (mu) CFs 11 532.27 5855 **PCFs** 24 4279.97 178.33 47.98 11 527.8 MFs SSFs 34 9.88 335.8

Table 4.1 The basic information of the new subjects of agriculture

Data source: Author's fieldwork

Table 4.2 The sources of labor in the farms of the four types of the newsubjects of agriculture in P township, 2015

NSAs	Family	%	Hired	%	Total laborers
	laborers		laborers		
CFs	1.04	21.44	3.81	78.56	4.85
PCFs	1.33	60.45	0.87	39.55	2.2
MFs	1.84	97.35	0.05	2.65	1.89
SSFs	1.24	99.20	0.01	0.80	1.25

Data source: Author's fieldwork

Notes: 1. An adult male laborer can work about 200 days per year on average. The number of the hired laborers can be calculated through the total work days of casual laborers divided by 200.

2. One adult female laborer is counted as 0.8 adult male laborer.

The general number of workdays per year of the agricultural workers in P township are 200. However, it is clear that the low-MFs and SSFs do not need 200 days of

work for their own small farms. So, there is a potential "surplus labor" issue on low-MFs and SSFs' farms. In usual, this issue can be solved by two ways. The first solution is to transfer in land to expand the scale of management, then make a full use of the "surplus labor". The second one is to go to other farms to sell their "surplus labor". Obviously, the first way is not feasible because of the high capital threshold of land transfer and the land grabs by the CFs and PCFs in P township. So, it only leaves the second way. In fact, it is by selling their labor that the low-MFs and SSFs are able to get 200 days of work per year. To further demonstrate this point, the situation of hiring out of the four types of NSAs can be seen in Table 4.3.

Table 4.3 shows that there is no one hiring themselves out in CFs and PCFs, which further confirms that they are the buyers, rather the sellers of the labor. In contrast, there are more than half of the MFs hiring out, which mainly refer to the low-MFs, not including the mid-MFs and upper-MFs. The proportion of hiring out in the SSFs is up to 82%. Obviously, the low-MFs and SSFs have become the labor sellers on the farm labor market. Due to low-MFs having much more land than the average SSFs, their days of hiring out are fewer than the SSFs. For SSFs, the income from hiring out is a large proportion of their total income.

NSAs	Total number	The number hired out	The average income of hired- out labor (yuan per year)
CFs	11	0	0
PCFs	24	0	0
MFs	11	6	8,083.3
SSFs	34	28	17,483.6

Table 4.3 The situation of hiring out labor by the four types of new subjectsof agriculture

Data source: Author's fieldwork

According to a strict definition, however, agricultural wage labor should be

"recognized that such populations were neither peasantries on the one hand, nor urban folk on the other" (Mintz, 1974: 298). That is, the agricultural wage laborer should be a free man without farmland or other means of production, and mainly rely on selling labor power to make a living. In this regard, can the low-MFs and SSFs, who own some means of production, be directly recognized as agricultural wage labor? Lenin (1977[1899]:178) reminds us that we should not "contain(s) too stereotyped an understanding of the theoretical proposition that capitalism requires of the free, landless worker". Lerche (2010:66) also finds that "in major part of the late-developing world ... the kind of capitalism that has developed has not led to the universalization of 'doubly free' labor". In fact, when exploring the agriculture workers in England, Marx (1990:877) already found that "the wagelaborers of agriculture were partly peasants, who made use of their leisure time by working on the large estates, and partly an independent, special class of wagelaborer, relatively and absolutely few in numbers". Furthermore, Lenin directly recognized "the class of allotment-holding wage-workers" as the rural proletariat. He stated that "this covers the poor peasants, including those that are completely landless; but the most typical representative of the Russian rural proletariat is the allotment-holding farm laborer, day laborer, unskilled laborer, building worker or other allotment-holding worker" (Lenin, 1977[1899]:177).

In this sense, low-MFs and SSFs undoubtedly can be recognized as agricultural wage labor. But maybe we can call them a "class of labor", a much broader concept (Panitch and Leys, 2001: ix; cited from, Bernstein, 2010:110-111). Bernstein (2009:250) used the term of "classes of labor" as "the inherited vocabulary of proletarianization and proletariat, semiproletarianization and semiproletariat", which "comprise 'the growing numbers … who now depend – directly and indirectly – on the sale of their labor power for their own daily reproduction". More specifically, the classes of labor "includes better-off wage workers as well as resources-poor farmers, but essentially dependent on their labor and with little or no capital" (Oya, 2015:73-74). Correspondingly, the labor power buyers can be

termed "classes of capital". They are the employers. There are various forms of classes of capital, "from corporate agribusiness to 'rich peasants' or village capitalists, who buy up land and livestock of their impoverished neighbors or who diversify into crop trading" (Bernstein, 2010:112).

Up to this point, the two-party – the buyers and sellers of labor – forming a farm labor market have emerged: one party is the class of capital, composed by CFs and PCFs. They are the employers, and hold a dominant position in the market. The other party is the class of labor, including low-MFs and SSFs. They are the employees, and are in a subordinate position. Thus, a farm labor market has emerged in P township. I suggest that it is the peasant differentiation that facilitates the formation of a farm labor market, and in return, the practices in the farm labor market deepen the existing peasant differentiation. The former one is the determining variable, while the latter one is the outcome. Now I turn to explore the inner structure of the farm labor market, mainly the various forms of agriculture labor and the ways of labor recruitment.

The Forms and Recruitment of Agriculture Labor

There are different types of agricultural workers in P township, and different types of farmers will adopt different forms of employment and will hire laborers at different times. Zhang Qian (2015:296) argued that "while the rise of capitalist agriculture is the main driving force for the growth of wage-labor use in Chinese agriculture, different forms of capitalist agriculture production generate different types of demands for wage labor and different patterns of labor use". Based on this understanding, I will take the types of agricultural workers as the main way to explore the wages, working times and other structural features of the farm labor market in P township. According to the length of time hired, agricultural workers can be identified as year-laborers (*chang gong*) and casual laborers (*duan gong*). According to the wage system, the casual laborers can be further divided into the day-laborer (*ri gong*) and contract laborer (*bao gong*). In addition, there are also seasonal workers (*jijie gong*) due to the rhythm of agricultural production.

Year-laborer

Hu Fang, aged 65, is the head of a family of 5 people. The son and his wife are working in Jiangsu province. The Hu couple stay at home and take care of their grandson. This family owns 5 mu of contract land. Old Hu told me that due to the high production cost, he didn't cultivate the contract land by himself, but transferred it out with a compensation of 400 jin of grain per mu per year. With the recommendation of the village cadres, Hu became a yearlaborer in a CF's farm in his home village in June 2012. His wage is 3,000 yuan per month, and about 30,000 yuan per year.

There are three sources of income of Hu's family. The first one is the land transfer fee, about 2700 yuan per year. The second one is Hu's wage and the third is the wage of the son, about 60,000-70,000 yuan per year. So, the total annual gross income is about 100,000 yuan, which basically comes from the wage (non-farm) income.

After transferring out land, the food of this family is all bought from the market, except for some vegetables produced from a small garden. As before, Hu's wife still raises some chickens, but they are now uneconomical without the land.

The agricultural workers such as Hu Fang can be called "year-laborers". In P

township, they are also called "workers' captain" (*duizhang*), namely, the bailiff of the farm. They are employed on a long term, generally a whole year. This type of agricultural worker in P township is small in number, about 30 people from my estimation. Although small in number, their roles played in the farm's daily production and management are vital. In chapter 3, it was pointed out that some CFs even directly entrust the whole farm's management to these year-laborers. Then, which types of scale farmers will hire year-laborers in P township? I have a general overview of the scale farmers who hired year-laborers. (Table 4.4)

No.	Occupation	Local or non-local	Farm scale (mu)	The number of year- laborers
1	individual business	non-local	873.51	3
2	private entrepreneur	non-local	570	2
3	village cadre	local	481.31	1
4	grain trader	local	820	2
5	village cadre	local	220.11	1
6	individual business	non-local	668.86	2
7	individual business	non-local	717.23	2
8	individual business	non-local	850.24	3
9	village cadre	local	235.43	1
10	private entrepreneur	non-local	600	1
11	teacher	non-local	787.96	2
12	individual business	non-local	452.44	1
13	agribusiness	non-local	1646	5
14	tenant farmer	non-local	538	1

Table 4.4 Basic information on the employers hiring year-laborers in Ptownship

Data Source: Author's fieldwork

In terms of occupation, about 12 scale farmers have non-agricultural capital and only 2 farmers have agricultural capital in the above group of 14 scale farmers. In terms of location, the non-locals occupy 10 year laborers, while the locals hire only 4 people. With regards to the farm scale, most of the above farmers have more than 500 mu of land, and 4 farms less than 500 mu of land (but two of them are close to 500 mu). Therefore, it is mainly the non-local and non-agricultural capital interests that are hiring year-laborers in P township. There appear to be three reasons.

First, although the scale farmers are engaged in different occupations, they have two characteristics in common, namely, absence and shortage of agricultural experience. These scale farmers live in the County and City, rather than in P township, so they cannot manage their farms full time. It is their absence that requires them to hire year-laborers, who do have agricultural experience, to look after their farms. Yang Chunfeng, a capitalist farmer, told me:

"Usually, I come to look at the fields every 2 or 3 days. In the busy season, I will come every day … In the busy season, I come and check the work progress and efficiency. Generally, I just give a call and tell them (year-laborers) what things need to be done".

Yang could be considered a diligent farmer, because some other capitalist farmers only come to have a visit every week, even once a month. The non-local farmers are not the exception. Although the local farmer Liu Guanshan could come to his farm every day, he is still not familiar with his own large farm operation. "The land has been transferred in 3 years, but he (Liu Guanshan) is still unclear (where the land is)", one of his year-laborer said. In addition, the lack of agricultural production experience requires them to hire year-laborers. The non-agricultural capitalists mostly engage in non-farm occupations. Obviously, they don't have the experience to manage a farm with hundreds mu of land, which is undoubtedly a formidable challenge. So, for these scale farmers without agricultural experience to manage the farms. Second, the large scale of farm requires that these farmers hire year-laborers. Under certain conditions, the number of laborers is proportional to the farm scale. From Table 4.4 we can see that as long as the farm scale is more than 500 mu, the farmers usually need to hire 1 or 2 year-laborers, or even 3 or 5 year-laborers. Accordingly, I argue that when the farm scale is over 500 mu of land, the year-laborers are needed, which can be seen from the 13 and 14th cases in Table 4.4. As the farmers with rich agricultural production experiences, they know very well that the year-laborers are required to achieve effective farm management when the farm scale reaches to a certain level. In general, one year-laborers can manage a farm with 300-400 mu of land effectively with the help of some casual laborers. As for the three village cadres, although their farm scale is less than 500 mu, they still need to hire a year-laborer because they can't do the farming by themselves.

Third, the scale farmers rely on the year-laborer to hire other casual laborers. For the non-local scale farmers, it is very important to find an "acquaintance" who can be relied on and trusted in an unfamiliar place, which can not only keep good relations with the local villagers, but also hire laborers through this acquaintance. One year-laborer said, "hiring laborer is a matter of face (*mianzi*). Even if he is working for other farmers, he will come to this farm when I call for him" (Zhou Dongnan).

From the above discussion, I have tried to show the importance of the year-laborer to the normal operation of a large farm. Then, an associated problem is which kind of people will be hired as year-laborers by the scale farmers?

It is probable that the scale farmers, the agricultural wage laborers, or the ordinary villagers all think that the ability of the female laborer is not comparable to male laborers. Maybe because of this reason, the year-laborers in P township are all male laborers. In terms of age, all except one of the year-laborers are over 60 years of

age, (the others are all in the 60-70 ages group). But the time they are employed should also be taken into consideration. For example, Li Mingcai, the No.1 case in Table 4.5, was aged 68 at 2015, but when he was first hired at 2008, he was just over 60 years old. In this regard, the scale farmers generally hire the 50-year-old plus male laborer. They are the "youngest" agricultural workers that can be found in P township. The laborers below the age of 50 will not choose to engage in farm work, because they can find non-farm jobs with higher wages in urban areas. The laborers above the age of 50 are not be employed in the urban labor market, so they turn to the agricultural sector, which is maybe the second-best choice for them.

Table 4.5 presents basic information on all the year-laborers interviewed. In most cases they are either the original production team leader in the Commune times, or the villager' group leader, with the exception of case No.11. This phenomenon raises the question: why did the scale farmers choose these two types of people with this experience as year-laborers?

The large-scale farms created after the land circulation have broken away from the peasant family mode of farming and turned to large scale agricultural production. However, this change is not just the expansion of farm scale, but also is the transformation of the mode of production. Here is a simple example. Now you have a chance to run a farm with 500 mu of land. What do you plan to do? The first step is the land tilling and the seeding. To be simple, you should decide how many days in advance you need to prepare the seeds, and how many seeds you should have. According to the number of laborers and the recommended amount of seeds per mu; you also should consider the work rate of the large tractor and the laborers. Planning for large scale operations is essential, but is often not in the experience of the large scale farmer. By the time of daily farm management, you should have a clear understanding to how much laborers are required to timely complete the farm works. All of the problems may can occur in large scale farm management suggests that the management of a large farm is totally different from

that of a small farm. To run a large farm with hundreds of mu of land, it definitely requires a set of management knowledge and skills at the macro level, which have not been mastered by the majority of Chinese peasants.

No.	Age	Original production team leader or not?	Villager group leader or not?	Wage (yuan / year)	Cultivating own land or not?
1	68	yes	yes	30,000	yes
2	65	yes	no	30,000	no
3	59	yes	no	22,500	yes
4	65	yes	no	30,000	no
5	60	yes	yes	25,000	no
6	53	no	yes	20,000	yes
7	62	yes	no	20,000	no
8	62	yes	no	20,000	no
9	64	no	yes	20,000	yes
10	64	yes	yes	20,000	no
11	60	no	no	20,000	no

Table 4.5 Basic information of some year-laborers

Data source: Author's fieldwork

However, some people have mastered this set of management skills and knowledge. They are the people who once served as production team leaders in the commune times. Li Huaiyin (2009:192-193) argued that "The team leader played a critical role in the everyday management of team production. When assigning tasks, for example, the most important thing for him was to estimate how many workers were needed for a certain job. An inexperienced leader could use too many or too few people, or sometimes the task was actually unnecessary or was bitrary planning." No matter good or bad, one thing is certain, that is, many of the people who once served as production team leaders have mastered the set of large-scale management knowledge to some extent. Although different in essence, the production team and today's P township's large farms have one thing in common, that is, they both deal with large scale agriculture production. So, the former production team leaders are just the "management talents" who are desperately needed by the scale farmers. After transferring the land in local villages, the scale farmers usually request the village cadres to recommend the older production team leaders. If there are not this kind of older production team leaders available, the scale farmers will find the village group leaders. It's because the village group leaders usually are the people who most familiar with the local land quality, terrain, water distribution and social relations, which are undoubtedly critical to ensure the smooth operation of a farm. All in all, it is always the older production team leaders with rich scale management experience and the village group leaders who are familiar with local conditions that are hired as year-laborers in P township.

The work usually done by the year-laborer depends on the confidence of the scale farmers. If the scale farmer is a person without farming experience, then basically all the production and management work is handed over to the year-laborers, except the financial affairs. Fang Jichu, the No.6 case in Table 4.4, is an individual business man, who runs a tea shop in F County. Fang does not have any farming experience, so he totally hands over his farm to two year-laborers, while he takes charge of the purchase of seeds, farm chemicals and fertilizers. One of his yearlaborers told me, "Whether tilling land or not; who would be called to plow the land, are both my jobs. The boss stays at home and does not come to the fields He does not care how many seeds are used per mu … I do not handle the funding matters, They send the farm chemicals, fertilizers here, then I check. If there is no problem, I sign my name on the delivery note" (Liu Bao). Another year-laborer employed by a scale farmer also stated that, "the tasks on the farm are all assigned by me. It could be said that the farm is mine. I represent the boss to manage the farm ... he (the boss) does not care anything, just plays mahjong" (Xu Longxiu). In addition, some year-laborers, as "workers' captains", also should record the labor days of the hired wage laborers in a certain period, in accordance with this

record, the employers pay the wages.

But if the scale farmers want to make some success in the agricultural production sector, then they will actively participate in the daily management of the farm. Under this situation, there is no clear division of work between the year-laborers and the scale farmers. "We make no distinction between 'him' and 'me' ... we coordinate with each other. If he doesn't make an arrangement, then I will do it. The matters I arrange are also what he wants. But, the laborers usually come to ask me about the farm works. If I am not here, then they will ask the boss. We coordinate with each other very well" (Li Mingcai). Sometimes, there is a clear division of labor between the year-laborers and scale farmers on farm management. "We have a division of labor. The boss is in charge of the techniques, while I am responsible for the laborers' arrangement, water management, spreading of fertilizers ... I am the one in charge of the specific production details. Which work needs how much labor is my job" (Hu Fang). Another situation is that the year-laborers arrange and deploy laborers, following the scale farmer's instructions. One scale farmer directly spoke out about this, "the 'workers' captain' is my executive organ, I am the above decision-making organ. (Yang Chunfeng)". Notwithstanding these differences, the main duty of the year-laborers is to arrange the production schedule, deploy the laborers, and monitor other laborers' quality and efficiency, to ensure the smooth operation of the farm.

In P township, there is no labor contract between year-laborers and the scale farmers, the wages and the working hours are both oral agreements, some even are just based on a tacit understanding. The wages of the year-laborers are determined by a fixed salary system, which is shown in Table 4.5. The annual salary of year-laborers in P township is between 20,000-30,000 yuan, namely, 2,000-3,000 yuan per month. Beside this basic salary, the scale farmers usually will give the year-laborers 1,000-2,000 yuan year-end bonuses. Although the wage is monthly based, it is not paid every month. Usually, the wage is paid at the end of the year. The

annual salary shows that the working hours of the year-laborers are 10 months (excluding December and January), but it is actually 12 months, because even in December and January, the year-laborers are still required to take care of the wheat fields.

After being employed as year-laborers, these agricultural workers generally are no longer able cultivate their own contracted land. Of the 11 year-laborers interviewed, only 4 still cultivated their own land. Although I did not carry out a complete survey of the year-laborers in P township, the above patterns are reliable. In this regard, most of the year-laborers, such as old Hu, have become the agricultural workers in the full sense.

Casual Laborer

Pan Guangmin is aged 64. His family owns 5.5 mu of land, which he still cultivates by himself. He thinks that he cannot earn enough money from the casual work to maintain his family. So, the 5.5 mu of land gives him additional support. In 2014, besides the basic grain ration, the 5.5 mu of land could bring about 7,767 yuan per year to Pan's family.

Besides the farming, Pan also hired himself out as an agricultural worker in the nearby farms. He didn't have a fixed the employer, but always changes. In the whole year, Pan can work 130-140 gongs labor days, and earn about 15,000 yuan. Pan said that he can work more labor days than before, because the big households don't do the farming by themselves, but rather hire wage laborers. Sometimes, Pan is also hired by the agricultural materials store to load and unload fertilizers, which can bring him about 2,000 yuan per year. So, by selling labor, Pan can gain an annual income of 17,000 yuan. Similarly, Pan's wife also hired herself out in a vegetable production farm. Her salary is 50 yuan per day, and the annual income is about 5,000 yuan. The total wage income of this older couple is about 22,000 yuan per year.

Pan owns a small vegetable plot on the roadside, and his wife brings some vegetables from the vegetable farm, so this family usually doesn't need to buy vegetables. Only occasionally they buy some meat from the market. Except for necessary costs, this older couple have basically no cost. This couple also raised 30 chickens and 7 ducks, which can provide them some meat at holiday time.

Agricultural workers, such as Pan and his wife, can be termed "casual laborers". The casual laborer is hired for a period of time, usually a few days. When the farm work is finished, the casual laborer will be dismissed. For the CFs, they will temporarily hire casual labor when some farm jobs require to be done as soon as possible; while for the PCFs, they usually hire casual laborers to support their own family laborers.

Unlike the fixed year-laborers, the casual laborers are "floated"– they change their employers usually; moreover, they usually hired out to the employers paying them higher wage. "No matter which bosses, when they call me, then I will go to work if I am available" (Hu Hejing); "I go to work everywhere they need laborers" (Li Yunlong); "I am employed on many big households' farms … all nearby. If they need some laborers to do the farm work, they will call me in advance … He called me, if I am not available, then he would call other people" (Pan Guangmin). This "floated" labor force is actually "temporary". "Compared with the laborers engaged in agricultural production all the year round, the amount of time of agricultural workers hired by other people is limited" (Lu, 2008:154). However, this "floated labor force" is also within a certain geographical range, usually located in the nearby villages.

Unlike the year-laborers who have a certain amount of knowledge of management and production, the duties of the casual laborers are to complete the farm work under the arrangement or instruction of the scale farmers or the year-laborers. "When hired out … the captain will arrange the work, e.g. you spread this plot of land, he spreads that plot of land" (Hu Hejing); "On his farm, the work is arranged by him (the boss)" (Pan Guangmin). Usually, the casual laborers do not care about the operation of the farm; they are just pure labor sellers; what they are concerned about is to complete the work and earn the wage. When to go to work, the casual laborers do not need to bring their own tools, they are provided by the employers.

According to the different wage systems, the casual laborer can be further divided into "day-laborer" and "contract laborer". For the day-laborer, "it is a system of time contract: the labor is hired for a certain period, usually a day" (Athreya, et al. 1990:137). Day-laborers are usually paid by time worked. The working time of the laborers in P township is usually between 8-10 hours a day: from 7:00 am to 5:30 pm, 1-1.5-hour break at noon; in the summer, from 6:30 am to 6:30 pm, with 2.5 hour breaks at noon. "He (boss) figures your working time. the wage is 100 yuan per day, and basically is 10 yuan per hour" (Zhang Wen). There exist differences in wages between male and female laborers. In 2014, the wage of a male laborer was 100 yuan per gong on average, while a female laborer's wage was 70 yuan per gong on average. But when hired out to do a crash job, the wage will be higher. "Sometimes, I do a crash job, then the wage will be high, at least 120 yuan per gong ... If you don't hire me at ordinary times, but hire me only to do a crash job, then the wage should be higher" (Pan Guangmin). In the busy season, the wage is the highest: the male wage can increase to 150 yuan per gong, while the females can earn 120 yuan per gong. Beside this monetary wage, the male laborers also can get a pack of cigarettes worth 5-10 yuan and some liquor, while the female laborers get nothing. Generally, the minority of local scale farmers will provide employees with a lunch, but the majority of scale farmers will not. This situation will be inverted in the busy season: the majority of the employers will provide a

lunch mainly in order to ensure the progress of work.

In general, laborers going out to find jobs usually can often work about 100-130 gongs per year, while the laborers occasionally going out to find jobs can only work about 30-50 gongs. Counting at 100 yuan per gong (male) and 70 yuan per gong (female), the male day-laborers can earn an annual income of between 4,000 - 13,000 yuan, while the female day-laborers can earn between 3,000 - 8,000 yuan per year. Obviously, there exist a wide gap between this wage and the year-laborers' wage. The wages of the day-laborers should be paid as soon as the farm work is finished. However, this is not the case. The employers usually pay the wages at the end of the year. Some employers with "good conscience" will initiate the process by which the laborers receive their wages, while some employers will not pay the wages until they have been challenged by the laborers.

Unlike the day-laborers, the wage of the contract laborer is based on the workload, that is, they get piece-wages. In P township, the piece-wages are usually adopted at harvest time. The laborers will be hired to carry the gunny sacks of rice. The wage for this job is 10 yuan per mu. The scale farmers usually hire male laborers as the contract laborers, because the farm work contracted is usually heavy work. However, there are some exceptions. In H, G, K villages, some scale farmers contracted out the work of spraying farm chemicals and spreading fertilizers to wage laborers. For example, the male and female laborers spray 30 barrels and 26 barrels of farm chemicals respectively in one labor day, while fertilizers are spread at a price of 10-15 yuan per pack (50 kgs).

Different from the year-laborers, the casual laborers still cultivate their own contracted land. One reason for this difference is the issue of job stability. Compared with the year-laborers, the casual laborers are not hired by scale farmers on a fixed basis, but rather irregularly. "When there are farm jobs to do, you can work a few months. But if there is no farm work to do, you just hang around" (Li

Yunlong). Another more important reason is the problem of income. As we mentioned above, the annual income of the casual laborers is just between 4,000-13,000 yuan, which obviously cannot maintain a family's simple reproduction. It is in this sense that the casual laborers need agricultural income to support their families' survival. "It is not enough to (make a subsistence) only rely on casual work. So, (I) must cultivate this 5.5 mu of contracted land. If not, (the income) is not enough" (Pan Guangmin).

Due to the difference of the planting and harvesting times, the low-MFs and SSFs can not only cultivate their own contracted land, but also be hired out to the scale farms to earn wage income. Some populist scholars highly commend this situation and claim that the low-MFs and SSFs can gain two incomes, which further proves the resilience and adaptability of peasant family farming. But, this situation is not so good as generally thought. I argue that the revenue from the contract land should not be treated as an increase in the family' income, but in fact a compensation for their reduced wage income. In this sense, it is actually provided as a form of subsidy to the scale farmers who hired these casual laborers.

In terms of age, the oldest male casual laborer I encountered was 72 years old, while the youngest one was aged 51, and most of them are over 60 years old. "The people working together with me are all over 60 years old. The people aged about 50 years old are few, not to mention the people aged about 40 years old" (Li Yunlong). The female laborers are relatively younger, mainly aged between 40-60 years old. They are the left-behind women. There exists a gender division of labor. In general, the male laborers engaged in the heavy farm work and some important tasks, e.g., spraying farm chemicals and water management. The female laborers participate in some "light" farm work, including weeding and work in the vegetable company. "The female laborers mainly do the weeding and seeding. If using the machine to spray farm chemicals, the female laborers cannot do it. Male laborers can do anything, while the female laborers cannot do some farm jobs. In

terms of the quality of the work, the male laborers are better than the female laborers" (Liu Bao).

Although there are no comprehensive statistics, I estimate the proportion of male and female laborers is approximately seven to three according to my fieldwork. Male casual laborers still occupy a large part of the farm labor market. With the increasing demands on laborers, the female laborers have increasingly engaged in agricultural production, and have become an indispensable part of the farm labor market.

Fixed casual laborer

Xie Ximin is 68 years old. This family has 6 people and 14 mu of land. Except Xie, all 5 family members have left and work in urban areas. In 2009, Xie transferred out 9 mu of land at the price of 400 jin of grain per year per mu, and left 5 mu of land to farm himself. Xie said that he will not transfer out the land until he is too old to work.

Xie plants early rice and late rice. In 2014, the 5 mu of land brought him about 7,040 yuan. Besides the farming, Xie also hires himself out on the labor market. Xie mainly works for a scale farmer in his home village. On this farm, Xie can work about 100 gongs in the whole year, with a wage of about 10,000 yuan yearly. When farming is in the slack season, Xie goes to other places to do some casual works, which can bring him about 3,000 yuan per year. So, the total wage income of Xie is about 13,000 yuan per year.

Usually, Xie eats hybrid rice, which he buys from the market at a price of 50 yuan per 110 jin. The annual consumption is about 500 jin. Xie also raises 10 chickens, and grows some vegetables in his small garden.

Xie represents a special type of agricultural worker, which is a mixture of both year-laborers and casual laborers. I call it "fixed casual laborer". The so-called "fixed" refers to the agricultural worker who is mainly employed by one scale farmer. When there are tasks to do on this farm, the agricultural worker should come and complete the work on time, that is he is on call at all times. However, the fixed casual laborer can go to other farms to do works temporarily, if his main farm doesn't have work for him to do. "Usually, I work for Xiao Mu. But, if there is no work on his farm, then I will go to other farms to do casual work. Those farms that need laborers, I go there" (Zhang Wen). "I mainly work for him (the boss). If there is nothing to do on his farm, then I will work for other people a few days" (Xie Ximin). There also exists a limitation, that is, before the fixed casual laborer goes to other farms to work, he/she should tell his employer first. "Where you go, even a long trip, you should tell the boss. And, you should tell him in advance" (Liu Fu).

As a type of agricultural worker with a hybrid nature, the fixed casual laborers have not only the characteristics of year-laborers, but also the aptitudes of casual laborers. Similar to the year-laborers, the fixed casual laborers are employed for the whole year. Once employed as fixed casual laborers, the job of these agricultural workers is relatively stable, at least for one year. So, they don't need to worry about finding jobs like the casual laborers. Similar to the casual laborers, the wage of the fixed casual laborer is calculated by the labor days worked, that is, the wage is paid by the day, not month. So, the fixed casual laborer, in essence, is a kind of casual labor with a stable job.

Except for a few non-local tenant farmers, most of the CFs and PCFs employ the fixed casual laborers. For example, Liu Min, a CF in E village, hired 5 fixed casual laborers, while another CF, No.13 case in Table 4.4, hired in total 20 fixed casual laborers, in addition to 5 year-laborers. So, why do scale farmers create such a

flexible way to hire laborers? In the interviews with the scale farmers, the reason mentioned was "difficult to find laborers". It seems so. It is hard to hire the laborers (especially in the busy season) so that the scale farmers tend to ensure the supply of the farms labor in this way. However, is it really the case? This question will be discussed later.

One of the benefits that this method of hiring laborers brings to the scale farmers is that they can save the trouble and cost of looking for laborers from time to time, and also avoid the risk of missing a farming season due to not being able to hire enough laborers in time. In general, the easiest way is to directly hire the agricultural workers as year-laborers on the farm. However, it is not so simple. The growth of crops on the farm doesn't need the input of manual labor all the time because of the seasonality of the agricultural production cycle. So, it would be a great waste of labor resources for the scale farmers to hire too many year-laborers. As one PCFs said: "Farm work is seasonal. After a busy season has passed, there will be not many things to do on the farm. So, you can't afford too many laborers" (Liu Feikun). It is based on these considerations that a flexible way of hiring laborers has been developed. This is a "semi-fixed, semi-mobile" labor system. Both the employers and the agricultural workers are willing to accept it. For the employers, they can ensure a pool of laborers for their farms, and reduce their labor cost. While for the agricultural workers, they can get stable work and certain earnings.

So, how many days does the fixed casual laborer work on the farm? In general, it is between 120-130 gongs per year (the minimum is 100 gongs, while the maximum is 150 gongs). One PCF said: "(If they can work) 130 gongs, then they will rarely go to other people's farms. As long as I give a call in advance, they will come to work" (Liu Feikun). In this regard, the work days of the fixed casual laborers are more than the casual laborers. In addition, the fixed casual laborers also go to find some casual work to do. Totally, they can work nearly 200 days all year round, which will bring the male laborers an annual income of 20,000 yuan, and the female laborers 14,000 yuan. This annual income is less than the yearlaborers, while higher than the casual laborers.

In terms of age, the fixed casual laborers are (composed by the male laborers) aged between 50-70 years old and the female laborers are mainly between 40-60 years old. Most of them still cultivate their own contracted land. Generally speaking, the fixed casual laborers have a more agricultural production expertise than the casual laborers. That is also why the scale farmers choose them as fixed casual laborers. Thus, it is no exaggeration to say that the fixed casual laborers are the backbone of the agricultural production system in P township.

Seasonal Laborer

The term "seasonal laborers" refer to the agricultural laborers who migrate to where there is a demand for labor in the area in the busy season. In essence, the seasonal laborers are a type of casual laborer. The reason why I discuss them with a special interest is because the existence of seasonal laborers involves the issue of job abundance or scarcity in P township. In P township, there are no seasonal laborers imported, but exported. However, it should be noted that not everyone goes out as seasonal laborers, because people need to take into account the economic costs (transportation, accommodation, etc.), and also confront the risk of whether they can find a job or not. So, the people who are seasonal laborers, are already familiar with local places, and opportunities or are guided by acquaintances. For these seasonal laborers, if they can find a job in P township, some of them will not go out as seasonal laborers, others will go out due to the relatively high wages outside. In P township, I met two kinds of seasonal laborers.

One is the transplanting worker. In mid-July, a large number of laborers go to the

north bank of the Yangtze river to transplant hybrid rice. The Yu couple in A village is one of these. They have been as transplanting rice workers for almost ten years. In terms of age, the male seasonal laborers are 50-60 years old, and the female are aged between 40-50 years. The younger people are not willing to do this farm work, while the elders are less likely to be hired. The accommodation of the seasonal laborer is provided by the local employers, usually in a little inn. The work of transplanting is very hard, which can be seen from the work time. In general, the transplanting workers begin in the fields at 2:30-3:00 am, until 7:00-7:30 am, when they have their breakfast. There will be half an hour for the laborers to have a lunch at 11:00 am -12:00 pm. After the lunch, there is no rest time. At 3:00-4:00 pm, the employers will supply some snacks for the laborers to fuel energy. The laborers continue to work until 7 pm. In order to save time, the employers usually take the food directly to the fields. The wage is paid as a piece-wage. From Yu's description, the price of transplanting was 180-200 yuan per mu in 2015. One laborer can transplant 1-1.5 mu of land per day on average, so the daily wage is about 200-300 yuan. Because it is the seasonal work, the wage is paid immediately after the work is completed. The transplanting workers usually go out to work for about 10 days, which is mainly because rice transplanting is seasonal work and the human energy demand is very high. Usually, each transplanting worker can earn about 2,500 yuan from this seasonal work.

The other type of seasonal laborer is the tea-picking worker. The tea-picking workers in P township are all female laborers. They usually depart from P township to Huangshan and Xuancheng in South Anhui Province to pick tea at the end of March or early April each year. The tea-picking workers are not small in number, mainly because there are not enough work opportunities in P township for the women. These female laborers basically are the "left-behind" women aged between 40-55 years old. Unlike the transplanting workers who go out spontaneously, the tea-picking workers are organized by a leader. This leader usually has some relations at Huangshang and Xuancheng. The board and lodging

of the tea-picking workers are also provided and arranged by local employers. The female laborers usually work from 7 am to 7 pm, with a one-hour break at noon. According to the different times, the employers adopt different wage systems. At the beginning of the tea-picking season, the employers take the time-wage, because it requires a higher quality of tea. For example, the tea-picking workers should follow the employers' requirement to pick the raw tea with "two leaves" or "three leaves". The time-wage is generally 180-200 yuan per day. When there is a large demand for tea or the tea-picking season comes to end, then the employers adopt the piece-wage, that is, in accordance with the weight of the tea. In 2015, the price of the raw tea was 20 yuan per jin. Usually, one tea-picking worker can pick about 8 jin raw tea, per day, which can bring them 160 yuan per day. These women usually go out to work for about 20 days and in total, can earn about 3,200 yuan in this period.

The phenomenon of seasonal laborers in P township is not common, but is very significant in the whole country. A survey report shows that there are about 1-3 million seasonal laborers in mainland China; the laborers mainly migrate from the central regions (such as, Anhui, Hubei, Sichuan, Hennan and other middle-kingdom provinces) to the coastal areas (such as, Shandong, Zhejiang, Fujian and Guangzhou) and Northwest (Xinjiang, Ningxia and Inner Mongolia), because the scale and intensification of the agricultural production in the latter two regions is relatively high (Social Resources Institute, 2013). In this sense, the agricultural seasonal laborers are a group urgently needing to be researched.

In summary, the year-laborers are small in number, but play a crucial leadership role in the daily management of farms. The "semi-fixed, semi-mobile" fixed casual laborers can be regarded as the backbone of local agricultural production due to their excellent agricultural production expertise. The casual laborers play an important complementary role in the busy season. In addition, due to the limited job opportunities locally, a small number of seasonal laborers have also emerged in P township.

Different scale farmers will adopt different ways to hire laborers. The year-laborers are usually hired by the non-agricultural capitalists who run a large farm with more than 500 mu of land. Due to their absence and lack of agricultural experience, these capitalists must have some stable and reliable year-laborers to help them to manage their farms. In order to ensure the supply of such laborers in the busy season, these large farms also hire some fixed casual laborers. The scale farmers running a farm between 300-500 mu of land, usually don't hire year-laborers, but hire some fixed casual laborers in the busy season. For the PCFs, they usually hire some casual laborers, but the minority of them also hire fixed casual laborers.

The Recruitment of Farm Labor

In *Farmland in Lu Village (Lucun nongtian)*, Fei Xiaotong identified two ways of obtaining agricultural workers, namely, to exchange labor (*huangong*) and to hire labor. Exchange labor is a way to attract laborers from outside your family without spending money; the nature of exchange labor is a kind of credit which is based on the relations between neighbors, friends, and relatives; in the economic sense, exchange labor is still the utilization of family labor, because in order to get a laborer from outside your family, member of your family needs to go to work on the other's farm as a return (Fei, 1990:85-100). Simply put, exchange laborer is a way of getting laborers through social relations and without costing money. By contrast, hiring labor is a way to get labor through spending money. In an investigation in Hebei Province, some researchers found that in a village in the context of marketization, the peasant households adopted different ways to get laborers with the use of different crops: in grain crop production, the peasant

households engaged exchange laborers, while in the production of a cash crop, the way of hiring laborers would be to employ them (Ren & Ye, 2011). I did not find the same difference in P township. I only found one case of exchange labor between two peasant households. There might exist more cases, but I still can argue that the time-consuming and complex way of exchanging labor has been replaced by the market-oriented way of hiring labor, which is much more simple and direct, but requires money. One result of this change is the increasingly fragile and vulnerability of the marginal peasant households. On the one hand, they don't have money to hire laborers, and on the other hand, they can no longer get free laborers through the exchange system. Finally, they had to sell their own labor to maintain the reproduction of their families and farms (Ponte, 2000).

The officials of the P township government promoted the notion that agricultural workers can find jobs on the scale farms. But the local government doesn't participate in the recruitment of labor. The recruitment of laborers in P township is still in a spontaneous matter. Under this situation, what specific strategies are adopted by the scale farmers to hire wage laborers? In P township's case, I identified the following three ways.

First, relying on social relations, the non-local scale farmers usually establish good social relations with the local village cadres and the village group leaders. Then, they hire laborers in local communities by virtue of these relations. One PCF said:

"When just come here, you don't know anyone and are not familiar with the situation here. The local villagers also don't know me and don't know how to work for me. Now, we know each other very well, after all I have stayed here for 3 years. So, the local villagers come over to me and ask me whether there are some things they can do or not in my farm" (Liu Feikun).

For the local scale farmers, they usually adopt their pre-existing social relations to

hire laborers. Compared with the non-local scale farmers, the local scale farmers can use established social relations much more effectively. Therefore, although the way of exchange labor embedded in the social relations has been replaced by the market-oriented way of hiring labor, the latter has not completely excluded social relations, rather the social relations have been integrated together with the recruitment of laborers and now play an important role.

Second, securing the job. For the agricultural workers selling their labor, they certainly hope that they can be employed for a long time. So, under the same condition, they usually choose to work for the scale farmers who can give them more labor days of work. As a strategy, the scale farmers also are willing to provide the laborers with more days of work, when it does not affect the production schedule and increase too much labor cost. By doing this, the scale farmers can ensure the labor supplements for their farms in the busy season. As one year-laborers, as a workers' captain, told me: "We should ensure that he has a job. For example, these two cups, I could call two people to wash them in one day, but I also could call one person to wash two days … Without affecting the production schedule, I could not let these jobs be finished in one day. Only by this way, can I ensure that they (the laborers) have work to do. If you hired some laborers and fired them in two days, they will not be willing to work for you again, because they lose motivation" (Li Mingcai). It is in this way that the larger scale farms can hire laborers easier than the smaller scale farms.

Third, material incentives. I have mentioned above that in P township some scale farmers did not pay the wages until the end of the year. The result is that many agricultural workers are not willing to work for those scale farmers. Therefore, in order to attract agricultural workers, some scale farmers pay the wage immediately after the work is completed, and also supply meals for the laborers during work periods. One CF explained: "I do not keep a record; I directly pay the wages. You work at daytime; I will pay the wage at night. By this way, the initiative of the laborers seems to be a little higher. So, hiring laborers is relatively easier than other farmers. I directly pay the wage. And I also supply meals for them, also including the wine" (Xu Xiumin). In addition, some scale farmers also give gifts (e.g. tobacco, wine, tea) and bonuses to their hired laborers. The purpose of the scale farmers is to ensure they can continually hire these laborers in the future.

In short, the scale farmers adopt different strategies to recruit laborers depending on the particular situation. These strategies are more adopted by scale farmers when they enter the community for the first time. Over a period of time, when they have established relatively stable social relations with the agricultural workers, these strategies will be turned into functional benefits like a 'warm outerwear covering the cold labor relations'.

"Difficult to find laborers" or "Hard to get jobs"?

In P township, whenever I discussed the labor issues with the scale farmers, they always complained that "it is difficult to find workers". However, when I asked the peasants who had rented out their lands about their livelihoods, they answered that "it is hard to get jobs". For these two opposite opinions, I am unable to determine which one is correct. I first estimated the amount of labor needed for all the agricultural production in P township.

I have no access to the exact number of agricultural laborers in P township. However, it can be roughly calculated from the data collected in my fieldwork. In P township's scale farms, on average they hire wage laborers about 1.5-2.5 workdays per mu for rice production and 1 workday per mu for wheat production, which does not include the necessary mechanical work. There are 33,767.73 mu of land in total for scale farming in P township. For rice production, the average labor input is 2 workdays per mu, so the total labor input would be 67,535.46 workdays; for wheat production, the total labor input is 33,767.73 workdays. Therefore, the annual labor inputs are about 101,303 workdays in total. Let's suppose that each laborer can work 150-100 days a year, then the scale farms need about 675-1,013 (844 on average) laborers in total. It is recognized that more workers are needed in the busy season. According to my observations, the demand for laborers would be double in the busy season, especially at harvesting time. That is, if two laborers are needed normally, then four laborers are required in the busy season. To sum up, even in peak seasons, the scale farms need no more than 2,000 wage laborers in P township.

Turning to see how many laborers can engage in agricultural production in P township, I listed the population of all ages in 2013 (Table 4.6), and the numbers of migrant labors in P township in Table 4.7. Like other places throughout China, most of the migrant workers are young and middle-aged: 18-49 years old for men, while 18-34 years old for women. In total, there were 12,024 people in these two age groups in 2013. Actually, there were 11,507 migrant workers in 2011. Although it is hard to say that all migrant workers are from these two age groups, it is probable that almost all the people in these age groups have gone to work outside. In other words, the male laborers aged below 50 years old and female laborers aged below 40 years old basically cannot be found in P township's labor market.

The number of male laborers aged between 50-69 years old is 3,797, while the number of female laborers aged between 35-59 years old is 6,229. The total number is 10,026. Of course, not all of these laborers engage in agricultural production. A document from P township government reports that there were about 7,000 agricultural workers in 2014(P township government, 2014). Although not all of the 7,000 laborers were involved in the local farm labor market, I still have enough reason to believe that the number of laborers in P township is great enough to meet the labor demands of the scale farms.

	0-17	18-34	35-49	50-59	60-69	70-79	80	Total
							and	
							above	
Men	2,084	3,748	4,727	1,995	1,802	863	289	15,508
Women	1,840	3,549	4,416	1,813	1,509	890	403	14,420
Total	3,924	7,297	9,143	3,808	3,311	1,753	692	29,928

Table 4.6 Age distribution of the population in P Township, 2013

Data source: Feng, 2015a:26

Year	Total	Intra-province
2011	11,507	2,575
2010	10,408	2,061
2009	9,874	1,457
2008	8,167	1,730
2007	9,665	1,378
2006	6,773	1,612

Table 4.7 Migrant workers from P Township, 2006-2011

Data source: Feng, 2015a:26

From the above calculation, I argue that the agricultural workers are in oversupply in P township. So why do the scale farmers still complain that it is "difficult to find laborers"? Before offering an answer to this question, it should clear what kind of laborers the scale farmers really want to hire. As mentioned above, the fixed casual laborer is the dominant force in P township's agricultural production. However, to be a fixed casual laborer, he/she has to go through an examination by the scale farmers and the worker's captains. Usually, only those who have well defined agricultural production expertise, a strong body, and positive working attitudes will be chosen as fixed casual laborers. As a matter of fact, according to the information from the scale farmers and worker's captains, the existing fixed casual laborers working on their farms have experienced several times the selection process. Those who do not fit the above requirements have already been sent away. "I don't blame the ones who are really unable to do things well. I would just tell them no need to come again" (Zhou Jin Nan). "For those who do badly, I won't hire them next time. By doing so, I have knocked out nearly 20 workers, and fixed 6 workers who are more reliable and positive" (Xu Li Bang). "These workers who stay here can work well. We won't hire those who work badly next time. We won't pay them immediately when we stop using them" (Liu Bao).

We see now that what scale farmers really need are relatively young skilled laborers with positive work attitudes. So, not all peasants who have freed themselves from their land can get jobs in the scale farms. Actually, most of them have been expelled from agricultural production altogether. So, the so-called "difficult to find laborers" is a relative problem of the scale farmers. In fact, it is difficult to find laborers that meet their requirements.

The complaint of "difficult to find laborers" does not only concern the current situation, but also is a signal for future years. Quite a few scale farmers believe that the status of the farm labor market will be worse in 10 years. Even the Director of the Agriculture Office of P township expressed the same concern:

"It even will be difficult to hire someone to spread fertilizer 5 years later. Most of the agricultural workers at present are old people of ages of 60-70. The young people simply have no expertise to do the farm work. After 5 years, I suppose the laborers will decline at least 70-80%. It will be really difficult to find someone to spread fertilizer."

However, this kind of worry is actually unnecessary. Marx pointed out the general law of capital accumulation long ago:

"As soon as capitalist production takes possession of agriculture, and in proportion to the extent to which it does so, the demand for a rural working population falls absolutely, while the accumulation of the capital employed in agriculture advances without this repulsion being compensated for by a greater attraction of workers, as is in the case in non-agricultural industries." (Marx, 1990:795-796)

In other words, in the case of no extensive areas of arable land, with the development of the capitalist mode of agricultural production, the demand for agricultural workers from capitalist agricultural production will not increase, but will probably decline. This is mainly because with the mechanization of agriculture, and the increased using of chemical inputs, the laborers will gradually be expelled from agricultural production. I will discuss in chapter 5 that the degree of mechanization and the amount of chemical use in the CFs and PCFs' farms is far higher than the MFs and SSFs' farms such that the labor needed for a certain unit in the former two farms are less than that of the latter two farms.

Year	Male	Female	
2008	50	40	
2009	60	40-50	
2010	60	50	
2011	70	50-60	
2012	70-80	50-60	
2013	70-90	60-70	
2014	80-100	60-70	
2015	90-120	60-80	

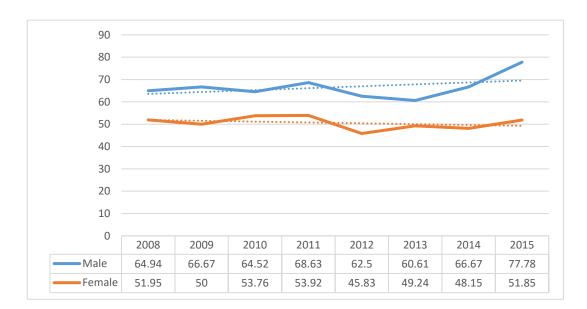
Table 4.8 The change in agricultural workers' wages in P township, 2008 to2015 (yuan/workday)

Date source: Author's fieldwork

Furthermore, if it is justified for scale farmers to say – "difficult to find laborers", then the wages of agricultural workers should have risen according to the "law of supply and demand". To verify this, let's look at the wages of agricultural workers in P township. Table 4.8 lists the changes of agricultural workers' wages from 2008 to 2015. According to the data in Table 4.8, we can see that the wage of the male

laborers was 50 yuan/workday in 2008, and increased to 105 yuan on average in 2015, while for female, it was 40 yuan in 2008 and 70 yuan in 2015. It seems that the monetary wages rose year after year, however, what about the real wages? There is a local saying that the wages of agricultural workers are determined by the market price of grain. When the grain price goes up, then the wages will rise. Is it true? One can look at the price of local staple food – early rice – for instance to illustrate this.

Figure 4.1 The purchasing power of agricultural workers' wages in P township



-- Taking early rice as an example (jin)

Figure 4.1 clearly indicates that the purchasing power of the male worker's wage has increased from 2008 to 2015, but the range is narrow; while the purchasing power of female worker's wage has even gone down. Therefore, the purchasing power of the agricultural workers' wages in general have not kept pace with the rise in the grain price, but is maintained within a certain range. In other words, the wages of agricultural workers have just risen nominally in the past 8 years, but no substantial increase has occurred, and in the case of women workers has even tended to decline.

On the one hand, scale farmers complain about "difficult to find laborers". While on the other, the fact shows that lots of surplus laborers have been expelled from agricultural production. They find it difficult to get jobs. At the same time, the wages of agricultural workers didn't increase with the complaint of "difficult to find laborers". How can we explain this paradox? Does the "law of supply and demand" have a problem?

The "law of supply and demand" itself doesn't have a problem, but it obscures some facts. With the expansion of production, the "labor demands" of scale farms can be met in two ways: the first one is to hire more agricultural workers; the second one is to increase the labor intensity of the existing workers on the farm, such as, asking one worker to finish two people's workload. For agricultural capitalists, increasing agricultural workers means not only the more labor cost, but also the issue of labor supervision. So, they usually are more inclined to take the latter approach to meet the increasing labor demands on their farms. Marx (1990:788) has stated bitingly: "It is the absolute interest of every capitalist to extort a given quantity of labor out of a smaller rather than a greater number of workers, if the cost is about the same." The other factor that forces the scale farmers to increase the labor intensity of agricultural workers is by limited working hours. As I have mentioned above, the usual working hours in P township is between 8-10 hours. So, how to gain a maximum profit with certain numbers of agricultural workers in a given time? The only way is to increase the labor intensity of the existing workers.

In short, capitalists' demands on "labor" continue to increase due to the need for profit and capital accumulation. However, this need is not necessarily to be met by increasing the supply of workers. More often, it is met by increasing the labor intensity of the existing workers. Evidence of increasing labor intensity is provided by agricultural workers':

"We could have a break respectively in the morning and in the afternoon when we worked in the production team before. But now working for big households, we don't have any break till to the lunch time or after work. No time for us to take a break." (Hu Hejing)

"The payment is 100 yuan a day, but it is really an exhausting work day. Taking the 100 yuan a day, but I do even more work than 105 yuan." (Zhou Li).

"As for cheerfulness, it was happier in the past time (the Commune time). Many people worked together, very happy … Now we can only take a rest after finishing all the work." (Pan Guangmin)

"Of course, it is easier to work in the production team. It was so happy working together with teammates, we could talk and laugh. But now, you get paid, you have to work hard. They pay you 100 yuan, you have to work more than 105 yuan. Then, they will be happy to hire you. I always feel dead tired operating the electric machine to spread the fertilizers after a whole day's work. "(Xie Ximin).

"When I work on my own land, I can take a break at any time if I feel tired. But if you work for others, you can't take a break at will. You have to work non- stop till too exhausted." (Zhang Wen)

"Now we have to bear more hardship than working in the collective time. We just have a few workers in total on the farm. We have to work 8 hours. There is no break normally. We work 4 hours in the morning. After lunch time, we come back and work another 4 hours in the afternoon. No time for rest." (Liu Fu)

The above statements reveal that the "contradictory opinions" between scale farmers and agricultural workers are actually not a contradiction, but a manifestation of the general law and consequences of capital accumulation. Even though a great number of agricultural laborers have been freed from their lands after the land circulation, the scale farmers would not hire them directly to meet the labor needs of the farms, but keep them as surplus laborers. The existence of a group of surplus laborers enables the scale farmers, on the one hand, to be able to increase the labor intensity of the agricultural workers in the farms; one the other hand, to depress the workers' wages, which is the fundamental reason why the wages of agricultural workers hardly increased over nearly 8 years in P township.

In fact, the complaint of "difficult to find laborers" reflects an illusion of "supplydemand relationship" in the minds of the scale farmers. They may not know that their labor demands can not only be met by increasing the number of agricultural laborers', but also by increasing labor intensity of the existing agricultural laborers. They may not realize the latter strategy, but they have taken it into their practice unconsciously. Conversely, the worry of "hard to get jobs" reflects the true situation of the peasant households. Obviously, after the land circulation, most of the agricultural laborers haven't been absorbed into the scale farms as said by local government officials. Actually they have been bypassed during the agrarian transition.

The Characteristics of China's Farm Labor Market

Despite China's farm labor market still not being matured, it has shown some important features. By observing the emerging agricultural labor market in P township, the following three characteristics can be identified. The first one is the flexible and informal nature of employment. The so-called "flexibility" refers to the seasonal labor demands on the scale farms, i.e., the scale farmers only hire workers in the busy season, but not in the slack season. This feature is associated with the biological nature of agricultural production, that is the inconsistency between labor time and production time. Marx (1992: 316) argued that: "Working time is always production time, i.e. time during which capital is confined to the production sphere. But it is not true, conversely, that the entire time for which capital exists in the production process is necessarily therefore working time." Different from industrial production, the labor inputs are discontinuous and seasonal in agricultural production, which means that there is no need to hire regular workers in agricultural production. Of course, this is mainly in terms of single crop planting. While in diversified crop planting, such as vegetable production in P Township, it needs regular workers for daily farm work. However, in order to prevent the situation of "difficult to find laborers" in the busy season, the capitalistic employers also try to secure a number of workers to some extent, to ensure the workers are available at any time. Therefore, a flexible labor system characterized by "semi-fixed, semi-mobile" worker, namely the fixed casual laborer, has been generated in P township. This flexible labor system allows scale farmers to gain greater capital accumulation.

This kind of flexible labor system is associated with informalization. "By informal, we mean employment that is not stable or secure, that lacks a written agreement or contract, and that does not provide social insurance or benefits" (Gallagher, Lee and Kuruvilla, 2011: 2). In my case, the year-laborers and the fixed casual laborers both have stable employment, but even these two kinds of laborers do not sign any kind of labor contract or enjoy social security benefits, not to mention the casual laborers. In addition to its association with the flexible labor requirements of scale farmers, the informal situation of agricultural workers is also related to the lower-MFs and SSFs who sell their labor for a living. Due to the limited job opportunities

and low wages, the income of agricultural workers is not sufficient to maintain the reproduction of a whole family, so he/she has to keep cultivating his own plot of land. Although the gains from such land is not much, it is nevertheless a necessary s economic factor that helps to maintain the reproduction of the family. It is also because of the persistence of household farm production that they sell their labor to scale farmers occasionally, and therefore they can't be fixed agricultural workers. On the other hand, because of the low wages, some of them don't want to be fixed agricultural workers, but prefer to wait for better prices. For those scale farmers who need laborers urgently, they will give higher wages. It is also because they are located in such an informal economic relationship that I include the lower-MFs and SSFs who sell labor in classes of labor.

The second feature is the aging and feminization of agricultural labor. According to my fieldwork, the agricultural laborers in P township are mainly between ages of 50-70 for male laborers and 40-60 for married female laborers. The former are generally unable to work in urban areas anymore due to their age, while the latter are usually the left behind women taking care of the elders and children at home. This result of observation is coincident with the opinions from other scholars who have conducted surveys in other provinces of China (Gao, 1994; Zhu & Yang, 2011; Song et al, 2009; De Brauw et al, 2013; Che, Zhang & Yu, 2015:286). Compared with the labor force of young migrant workers, the labor force of elderly men and married women have always been called disparagingly "secondary" labor force. So, in some scholars' eyes, it is reasonable for these "secondary" labor forces to get lower incomes in the agricultural sector, while the primary labor force of most households gets better earnings in the non-agricultural sectors in cities. This phenomenon is considered a kind of self-adjustment of peasant households when they face the growing income gaps between urban and rural areas, and between the non-agricultural sector and agricultural sector. They name it as a mode of division of household laborers - "semi-worker and semi-farmer" or "male industrial working and female household farming". However, as a matter of fact,

this is only a representation of an unequal relationship between urban and rural in the peasant household. Seemingly, the peasant households can arrange the division of household laborers "freely", but actually they have no choice and have to urge the main laborers of their households into non-agricultural sectors which can offer them better incomes.

Not all peasant households sell their labor, only those poor peasant households do it. Two interviewees said:

"My family is not rich, I can't retire. Some families are better than mine, the aged people do not have to work. The rich people simply don't work anymore, instead, they spend money to exchange easy lives. Some elder people still keep cultivating 7-8 mu of land, but their children prefer to hire laborers like me to work for them, so that their parents don't need to work themselves." (Pan Guangmin)

"All my working partners are women. They are about my age. They have to stay home to take care their families, otherwise, they would have already gone to work outside. Some families are richer if the men can earn money, then the women don't need to work and only play mahjong at home. They can't bear even just asking them to stand in the greenhouses all day." (Wang Weiping)

From the statements above, we can see that whether or not the older men and women selling their labor in the labor market mainly depends on the incomes of their children or husbands who work in non-agricultural sectors. If the earnings of their children and husbands are sufficient to maintain the reproduction of their families, even bring a good life, then the older men and women don't work for others; otherwise, they have to hire themselves out. We see that the dynamic of social differentiation is everywhere. The poor families are forced to sell all family members' labor to maintain the reproduction of their families. The other important factor leading to the aging and feminization of agricultural laborers derives from the nature of capital which constantly seeks cheaper labor. The improvement of mechanization in agriculture and the trend of "de-skilling" gives support to capital to acquire cheap labor. In my fieldwork, some informants said: "Now farming is not that hard". The reason is because of the improving level of mechanization in agricultural production, particularly in the plowing and harvesting sectors which need the hardest work and a large amount of labor. In the sectors of sowing, spraying and fertilizing, the use of all types of agricultural machines and tools have made agricultural production tasks much easier than before. As Marx (1990:517) said, "Machinery dispenses with muscular power" the improving level of agricultural mechanization and the emergence of new tools have made agricultural production not dependent on young strong laborers like before. The expelling of strong male laborers from agriculture will be more significant with the popularization of socialized agricultural machine services. The other trend which facilitates the development of capital is that of labor "deskilling". If successful farming in the past required high levels of knowledge of ecological conditions and a willingness to devise and adopt better methods of cultivation within acceptable boundaries of uncertainty and risk (Bernstein, 2010:62), then modern agricultural production no longer requires that farmers have this kind of knowledge. In the scale farms in P township, only the managers of the farms or the "worker's captains" are required to have this kind of knowledge, but not for other wage laborers - of course it is better if they have this type of knowledge – they just need to carry out the instructions of the farm managers. This is what "de-skilling" means. Therefore, with the effects of mechanization and "deskilling", the production in scale farms no longer needs young strong laborers to perform. The "secondary" labor forces can also meet their needs fully. Therefore, the cheaper labor force of elderly men and married women are suitable to meet such requirements.

Third, the localization of agricultural labor relations. Some scholars revealed in previous studies - for example Kevane (1994) and Oya (2015) in Africa, and Rao (1988) in India – that labor relations are largely within the boundary of village, and for those labor relations between villages, there will be differences including wages, working conditions, and mode of employment. However, my research is not coincident with this view. When I observed the agricultural labor relations at the "township" level, I found that they have broken the boundaries of villages. Specifically, the farm laborer mainly finds jobs in nearby villages. In other words, the farm laborers won't go to work in the places that are too far away from his/her own village. This is mainly because of the inconvenience for walking back and forth, especially in the situation without lunch providing by the employer, and the unfamiliarity with the natural conditions. In fact, the scale farmers also prefer to hire the local laborers who know well the local conditions of production and so are able to carry out the instructions for production better. Therefore, there is an unwritten commitment in P township that if you rent the lands of this village, you'd better hire the labor in this village too. By doing so, the scale farmers can keep good relationships with the villagers. For those with capital from outside, if they can't maintain good relations with the community, it could be difficult for them to survive in that region. I learned of such a case in P township. A capitalist farmer hired an outsider as the team leader of farm laborers in K village. This choice resulted in his having difficulty in hiring farm workers in the K village. The laborers of K village consider that the team leader should be a local person, and it should be a right for the local laborers to earn this wage. In the second year, the situation was changed when the capitalist farmer hired a local person as the team leader. This is the circumstance that the localization of labor relations is produced. It should be noted that, although the labor relations exist in such a range, there are no significant differences in the terms of wages, working conditions and mode of employment in the labor market of P township (see Table 4.9).

So what effects have localized labor relations brought? In my view, the most

important effect is that it has enhanced the localized monopoly power of classes of capital. At the same time, it has intensified the differentiated and fragmented inside of classes of labor. When the management right of land is highly unequal, localized labor relations can enhance the localized monopoly power of classes of capital. As mentioned above, due to the level of knowing the community and other factors, the agricultural workers generally don't go to work far away from their own villages, even stay in the same township. The scale farmers preferring to hire the local farm laborers also concerned about these factors. In addition, the agricultural laborers have no other choices but work in the scale farms, because there is no labor concentrated industry at P township. As an agricultural worker said: "We can't find other jobs nearby except working for Jiang's farm … if he doesn't want me, I will have no job"(Wang Weiping). In such situation, the scale farmers who can offer job opportunities have gained a kind of localized monopoly power, although at the same time they still need to concern about the possible challenges from forces of the community itself in some situations.

	(yuan/workday)	
Village	Male	Female
L	100	/
М	100	/
K	90	70
Ι	100-110	70-80

Table 4.9 The wages of farm labors in each village in P township in 2015(yuan/workday)

K	90	70
Ι	100-110	70-80
J	90-100	70
Н	100	70-80
G	110	70-80
F	100	70
D	100	70
С	110	70
E	120	80
А	110	60-80
В	110	70-80

Data source: Author's fieldwork

In addition, localized labor relations have impacted on agricultural laborers' work experiences in different regions, as well as their relationships with scale farmers, which inevitably intensifies the internal differentiation and fragmentation of classes of labor. In the interviews, some agricultural workers praised their employers, even regarded them somewhat as "kind landlords". For these workers, they have maintained good relationships with their employers. However, some agricultural workers expressed dissatisfaction about their employers' management and supervision, and their wages, while the employers complained about the workers' low work efficiency and poor attitudes. The extreme situation is the case of K village, mentioned above, where the localized labor relations have even started to expel agricultural workers from other villages. Clearly, in a situation lacking class consciousness, the localized labor relations have generated differentiation and fragmentation within the classes of labor that originally were at the same exploited social level. (Bernstein, 2009: 250; Zhang, 2015: 300). By contrast, classes of capital can work together through all kinds of opportunities and conditions, which further enhances their dominant position in the farm labor market. That is also why the wages of agricultural workers were depressed and only increased slowly in P township over the last 8 years.

Summary

In the opening of this chapter, I discussed the research status of the "agricultural worker". I argued that due to the lack of statistical data and the issue of the perspective of pro-peasant scholars, the phenomenon of the large-scale emergence of agricultural workers has still been neglected by and large. Some scholars have paid attention to this phenomenon, but due to the problems of data quality and the questionable methods of estimation, these scholars have not made a correct interpretation of the phenomenon of the agricultural workers. Rather they have

covered up the scale of the agricultural worker phenomenon, which further results in misunderstandings of the agrarian transition in China. Different from the previous research, this dissertation argues that the agricultural workers have emerged on a large-scale in China, and have brought about a profound change in agricultural production relations. On this basis, this chapter has focused on four questions, namely, the formation mechanisms of the farm labor market, the structural conditions of this market, the issue of the laborer being bypassed, and the features of the market.

First, with the peasant differentiation, a farm labor market has developed in P township. In this market, the class of capital, constituted by capitalist farmers and pretty-capitalist farmers, are the labor purchasers, while the class of labor, composed by lower-medium farmers and small-scale farmers, are the labor sellers. There is a very close relation between the differentiation of peasants and the formation of the farm labor market: the former one promoted the formation of the latter one, while the practice of the latter has reinforced the former.

Second, according to the time and other conditions of employment, I identify four types of agricultural workers, including the year-laborer, casual laborer, fixed casual laborer and the seasonal laborer. The year-laborers are fewer in number, but play a key leadership role in the daily management of the scale farms. The fixed casual laborers with the nature of "semi-fixed, semi-mobile" are the most important laborers in P township. They largely ensure the smooth operation of the scale farms. While the free and mobile casual laborers are an important supplementary force for the scale agricultural production system in the busy season. There are no seasonal laborers imported from outside the area, but exported in P township, which indicates the existence of a surplus labor problem. In P township, the scale farmers usually hire laborers by relying on social relations, ensuring the job security and providing material incentives.

Third, after the land circulation, the agricultural workers freed from the land have not been absorbed into the scale farms, as the local officials promised. These agricultural workers have actually been bypassed. The emergence of this phenomenon is fundamentally due to the influence of the general law of capital accumulation. The "labor demands" on the scale farms are not necessary only resolved by increasing the number of laborers, but also can be met by increasing the labor intensity of the existing laborers. This approach produces two effects: one is to enable the scale farmers to increase the labor intensity of workers, while not increasing the production costs; the other one is to help them to depress workers' wages with the existence of an "agricultural reserve army".

Finally, there are three features of the emergent farm labor market. The first one is the flexibility and informalization of employment. This employment system meets the requirements of capitalist agricultural production, and contributes directly to capital accumulation. The second feature is the aging and feminization of agricultural labor. The farm laborers in P township are mainly of the ages 50-70 for male laborers and 40-60 for married female laborers. This is because, on the one hand, poor families are forced to sell all family labor to maintain the livelihoods and reproduction of their families; on the other hand, the nature of capital which constantly seeks cheaper labor for its accumulation. The third feature is the localized agricultural labor relations. This situation enhances the localized monopoly power of the class of capital, while it exacerbates the internal differentiation and fragmentation of the class of labor, which places great stress on most agricultural workers.

All in all, the rise of the land circulation market and the farm labor market demonstrate that two most important factors of agricultural production in P township have already been commercialized. The capital class can transfer the land and purchase labor very easily and thus can build the conditions for the establishment of the capitalist mode of agricultural production in P township.

Chapter 5: Can Capitalist Agriculture Persist?

In chapter 3 and 4, I argued that the two types of farmers with the capitalist nature - capitalist farmers and petty-capitalist farmers - have already established a dominant position in P township's agricultural production system. While the other two types of farmers with non-capitalist nature - medium farmers and small-scale farmers - have been marginalized into a subordinate position in this system. However, some pro-peasant scholars have proposed questions, as follows: 1) In terms of quantity, China still has more than 200 million peasant households and 600 million small peasants, which suggest that the peasant family farming still occupies a dominant position in China's agricultural structure. 2) The peasant family farm (perhaps equivalent to what I identify as low-medium farmers and small-scale farmers) has run with its own internal logic and can actively adjust according to the external environment, which helps it to resist the shock and penetration of capitalism. 3) The agricultural producers with capitalist natures cannot compete with peasant family farmers. This is mainly because of, one the on hand, the natural advantages of peasant family-run farming, including labor inputs, land outputs and other aspects; on the other hand, the issues in production cost, labor use and supervision, the capitalist agricultural producers will meet great risks in agricultural production and in the market (He, 2011a, 2013; Sun, 2013; Guo, 2012; Xia, 2014).

But, does peasant family farming can still occupy a dominant position in today China's agricultural production? Are the agricultural producers with capitalist nature really some sort of passing pages driven by state power? Do the scale farmers really tend to decline inevitably due to the "natural superiority" of the peasant family farming? This chapter will discuss these questions.

This chapter is divided into three parts. In the first part, I will briefly introduce the

process of capital penetrating agricultural production from 2007-2016 in P township. Through this introduction, the study seeks to explain that the process of capital entering into agricultural production was not an easy process, not overnight, but rather an iterative and incremental process. In the second part, the survey data will be presented to enable a comparative study of farm productivity and labor productivity between the four types of new subjects of agriculture. There are two objectives with this comparative study: one is to deepen our understanding to their characteristics, the other is to prove why the CFs and PCFs can defeat the peasant family-run farming. In the third part, I report on a dialogue with Philip Huang. I argue that the "twin crutches mode" of peasant households will not hinder the development of CFs and PCFs, but rather create the preconditions for their development.

The Process of the Capital Entering into Agriculture Production

In formulating *The Agrarian Question*, Kautsky (1988[1899]:11) stated that: "Agriculture does not develop according to the pattern traced by industry: it follows its own laws". Similarly, Lenin (1977 [1899]:311) claimed that: "From the very nature of agriculture its transformation into commodity production proceeds in a special way, unlike the corresponding process in industry". It is the particularity of the agriculture that brings some limitations to capital entering into agriculture. Although there are many restrictions, the reality is that capitalism does not stop the pace of entering into agricultural production; it is always looking for opportunities and strategies to overcome these limitations. Take P township as an example, I will show how the capitalist mode of production was built up in agriculture.

The Failure of the First Time

The first round of formal land circulation was launched in P township in 2008. As shown in Table 3.5 and Table 3.7 in chapter 3, there were 10 CFs and 10 PCFs in P township from 2008 to 2010. Obviously, capital poured into the agriculture in P township at the beginning of the land circulation. There are two reasons for capital actively transferring in land. The first one is the temptation of huge profit when transferring land. Most of the capitalist hold the idea that "if the peasants can earn 1,000 yuan per mu, then I can earn 200 yuan per mu at least, even though my expertise in farming is poorer than that of the peasants. So, I can earn 20,000 yuan if I transfer in 100 mu of land, then 200,000 yuan if I transfer in 1,000 mu of land". Stimulated by the false idea that "income and scale are proportional", capital was advanced to transfer land on a large scale. Some scale farmers even directly signed the land transfer contract without a field visit. One capitalist farmer said: "I did not do farming before. When coming to sign the contract, I did not have a land visit. They told me the acreage of the field, then I transferred in the land" (Chen Fuwei). The second one is the promotion of the local government. In order to present the effects of the land consolidation project, the local government has especially encouraged the "able-person" (neng ren) with funds or the dragon-head enterprises to transfer in the land.

In general, capital has the great ambition to engage in agricultural production. They invested a large amount of money in buying a complete set of agricultural machines and equipment. For example, Yang Chunfeng spent about 200,000 yuan on agricultural machines, including one large tractor (combining with four sets of rotary cultivators, and two ditchers), two small tractors, one large seeder, one large spreader, six sets of large sprayers, and thirteen 6-inch water pumps. Chen Fuwei also paid about 350,000 yuan in 2010 to buy agricultural machines, including one large tractor, four small tractors, two sets of large sprayers, eight water pumps (3 with 4-inch, 5 with 6-inch), one harvester and four rice transplanters.

When just entering agricultural production, the scale farmers did not have an agricultural operational mode within their own experience. They still copied the "double-cropping rice" planting pattern from local peasant farming. Anyone with common sense about agriculture knows that the most critical stage of this pattern is the "*shuang qiang*" season, that is the "immense pressures between the first and second rice crops" (*shuang qiang*) (Huang, 1990:225). This period is a short time, usually from mid-June to mid-July, and is the peak period for labor. Before the 1990s, this labor issue would be solved with the mutual cooperation between neighbors and relatives. After the 1990s, the peasants were inclined to obtain the labor from the market. Since scale farmers adopted the double-cropping rice planting pattern, then the amount of labor needed was naturally multiplied in the "*shuang qiang*". Even though willing to raise the daily wage, providing two meals, tobacco and wine, the scale farmers still could not hire enough laborers.

Besides, the scale farmers paid little attention to the particularities of agriculture and did not possess the experience of scale management. Many scale farmers did not take the agricultural production as difficult, they just equated it to industrial production, and adopted the industrial approach to manage agriculture. What's more, scale farmers usually did not personally work on their own farms. They just asked the agricultural worker's captains to take charge of the daily management affairs. For example, Lu Xian and his other two partners transferred in about 2,003.6 mu of land, and hired 5 year-round laborers to manage their farm. One of these laborers told me: "The three bosses do not care about anything; they just gamble after lunch" (Liu Bao). With management like this, failure is inevitable.

Even though having some experience of peasant farming and participating in the daily management of scale farming personally, some scale farmers still failed. The director of Agriculture Office in P township told me of a case. "Just like Cao Dafu, who thought that weeding was a simple thing; just hire some laborers to clear the weeds in the fields. Very simple. However, (the agricultural production management) really did not like it" (Tao Pu). Undoubtedly, Cao has some experience of peasant farming, when the scale of the farm expanded, his previous experience did not work. The scale agricultural production required a new set of management skills and knowledge. Cao apparently did not own the new set of expertise and knowledge, which led to the failure of his operation.

In addition to above two issues, some poor consequence of the land consolidation project also brought some troubles to the scale farmers. "The condition of the fields was so poor in the first year, the fields are uneven … how do you do farming in this kind of field. When watering, part of the field has already been swept over the boundary, while another part of the field has no water. The rice yield of the first year was only 400 jin per mu" (Chen Fuwei). "At the beginning, the fields that had just been consolidated were really hard to cultivate … most people were afraid to transfer the good fields. Some field ridges needed to be repaired, otherwise, the water would leak away. The first two years were extremely difficult" (Yang Zhou).

Under the combined effects of the above several factors, capital's first time to enter agricultural production failed. This result could not be imagined by the capitalists. As Chen Fuwei said: "I originally thought I would earn some money, but who knows the risk is so great. I thought I would earn less money at worst, but never thought I would lose so much". After receiving the land at the end of March 2009, Chen only planted 300 mu hybrid rice in the total 638 mu of land, due to missing the farming season. Later, he only grew 400 mu wheat due to the shortage of laborers. When it came to harvesting at mid-June 2010, about 60-70% of the yield was lost because of bad weather. Chen lost nearly 300,000 yuan after he transferred the land. "The loss was so great at that time, I cannot afford", Chen sighed heavily. While Lu Xian and his two partners have lost over one million yuan over 3 years. Cao Dafu transferring the most land has lost 5 million yuan even though enjoying many government subsidies. It was a complete failure of capital entering into

agricultural production for the first time.

Subcontract the Farmland

Faced with the huge financial losses, the original large farms with partnership all have disintegrated. Except for Yang Chunfeng, most of the CFs chose to subcontract the land to the professional tenant farmers from Chaohu and other places at a price of 80-100 yuan per mu. Among the 20 CFs and PCFs, there were 15 farmers who subcontracted the land, in which some subcontracted the whole land, while some subcontracted a part.

In my interviews, the oldest tenant farmers I met was aged 62, while the youngest one was 38 years old. They have already transferred in land for 4 to 20 years at outside. For example, the tenant farmer from Chaohu who subcontracted land originally was a cook and was led by his relatives to do farming in P township at 2011. Although lacking experience, he is now able to operate his farm effectively with the help from his relatives. Mu Hongcai, aged 49, had already transferred land in Shanghai in 1993. Mu came to P township in 2011 and subcontracted 638 mu of land from Chen Fuwei. Wan Xing went out to transfer land much earlier than Mu. Wan had already rented land to farm in Jiangsu Province in 1992, and in 2009 he came back to Anhui province to rent land. Wan came to P township in 2011 and subcontracted 300 mu of land from Cao Dafu.

Undoubtedly, these tenant farmers possessed the rich experience of scale agricultural production. Whenever I mentioned these tenant farmers, both the local government officials and other agricultural producers agreed that "the Chaohu farmers are really good at farming and skillful" (Gui Jin); "you have to admire these Chaohu farmers, they indeed have a set of farming skills and are able to increase the yield" (Fang Yinhuag). In general, these experiences are mainly

represented by the following aspects:

The first is the "rice/wheat" planting structure. The tenant farmers did not adopt the "double-cropping rice" planting structure, but the "rice/wheat" planting structure. The tenant farmers knew well the labor issue of the "double-cropping rice" planting structure.

"The double-cropping rice is not a good choice, you can't find laborers in *shuangqiang* season. Those bosses (CFs and PCFs) planted the doublecropping rice in the first year, but could not go on for the second year, because they could not hire laborers in the hot weather. The local peasant households also grew the double-cropping rice. So the time conflicted. When your farms need laborers, they are busy with their own farms. At that season, the temperature reaches up to 38, 39 degrees centigrade. Although, the wage is high" (Xie Shun).

With this consideration, the tenant farmers chose a medium rice named "Jiahua No.1". The advantages of this rice variety are fertilizer tolerance, lodging-resistant and stable yield, while the drawback is the longer growing period – about 158 days. The longer growing period of this rice has made planting other varieties of rice impossible, and very difficult. Thus, the tenant farmers chose to grow winter wheat. Compared with double-cropping of rice, the rice/wheat planting structure can effectively avoid the labor issue, greatly reduce the degree of hard work and the number of laborers required, and saves the cost of production, with only a slight decrease in revenue. Theoretically, the revenue of double-cropping rice is higher than the rice/wheat planting structure. However, the high revenue in theory does not represent the high revenue in practice. Because the revenue of the double-cropping rice will decline if the management is not in place. "Plant double-cropping rice can earn more money than rice/wheat, but if the management cannot

keep up, there is also no revenue. The peasant households … can keep the management in place. But if it is a large farm with a large amount of land, planting the double-cropping rice will not work" (Mu Hongcai). However, because the management can be kept in place, a stable income can be gained from planting rice/wheat. As one of the tenant farmers said: "(We) who do the farming must ensure stability." (Sun Dong).

The second is to make full use of family labor under the appropriate scale. "Generally, we do not hire laborers, except spraying farm chemicals. Basically, all the farm work is done by me and my wife" (Wang Zhen). Among the tenant farmers I interviewed, the largest farm scale is 638 mu, the smallest farm scale is 130 mu; except for these two poles, the scale of all the other 12 tenant farmers' farms is between 200-300 mu of land. The scale of 200-300 mu and the rice/wheat planting structure would allow two family laborers to be used fully. So, even though only hiring some laborers in the busy time, the farm can be managed effectively. At this appropriate scale, a farm with two family laborers generally only needs to hire 60-70 gongs labor days; but if only one family laborer, then the farm requires hiring 100 gongs labor days. For example, Xie Shun, a farmer farming 200 mu of land, hired 62 gongs labor days during the 2014-2015 farming period, including 30 gongs in wheat production (seeding 15-16 gongs, spreading fertilizer 4-5 gongs, spraying chemicals 4 gongs, harvesting 6 gongs) and 32 gongs in rice production (spreading fertilizer 7-8 gongs, spraying chemicals 4-5 gongs, harvesting 20 gongs). With regard to this feature of tenant farmers, other agricultural producers and local villagers all give praise. "The Chaohu farmers are good at farming. They generally cultivate land about 200 mu with one couple. They are particularly diligent. They can earn about 80,000-100,000 yuan from one season of rice" (Sha Yunkai); "Those Chaohu guys subcontracted land in P township ... They usually rely on themselves, and only hire few laborers. They work very hard and usually can obtain an annual income of 80,000-90,000 yuan" (Liu Fu).

The third is a set of agricultural production and farm management experiences. The principle of this set of experiences is "to gain the most stable and maximum interest with the minimum of cost", which is mainly reflected in two aspects.

One aspect is to procure cheap but high-quality agricultural materials. With their interpersonal and information networks in other places, the tenant farmers always can purchase the same seeds in other places with a much cheaper price than in P township. For example, the rice seeds can be bought at a price of 3.5-3.6 yuan per jin with the freight charge, while in P township, the price is 4 yuan per jin. It is the same for wheat seeds. "I buy the seeds from other places, because the price is cheaper than here, even plus the freight charge. The price of the wheat seeds is 1.4-1.5 yuan per jin at Jiangsu province, much cheaper than here" (Tu Qing). Not to mention the farm chemicals. All the farm chemicals that tenant farmers use are purchased from their hometowns. They mainly use the foreign farm chemicals, which have a higher price than the domestic ones. Compared with the domestic farm chemicals, however, the foreign ones have a good efficacy, which can reduce the times of spraying, and save labor costs. In short, the tenant farmers purchase the agricultural materials based on the overall consideration of quality and price. "I buy seeds, farm chemicals, and fertilizers in three different places. I expect to buy the best thing with the lowest price" (Chen Neng); "I buy seeds, farm chemicals, and fertilizers in different places. The small amount of money must be considered. Where the price is cheap, then I go there to buy" (Tu Qing).

The other aspect is to input the agricultural materials reasonably and intend to balance the production cost and the yield. Basically, the tenant farmers follow a similar set of production criteria. To be specific, the amount of seeds will be adjusted according to the sowing time. The amount of wheat seeds is between 20-25 jin per mu around October 20th, while it will increase to 40-45 jin per mu by early December. The amount of rice seeds is between 8-9 jin per mu around June

10, while it will increase to 10-11 jin per mu around early July. In general, the wheat seed cost and the rice seed cost will be kept to around 80 yuan and 45 yuan per mu respectively. As for the farm chemicals, the wheat usually should be sprayed with herbicides one time and germicides two times. The rice needs herbicides three times and pesticides four times. Usually, the farm chemical cost for wheat is around 60 yuan per mu, and the rice is around 200 yuan per mu. As for the fertilizer, the tenant farmers usually spread mid-grade compound fertilizer 100 jin per mu and urea 50 jin per mu. The rice will use the same amount of compound fertilizer and about 70-80 jin urea per mu. Thus, the fertilizer cost of wheat is near 170 yuan per mu, and the rice is near 200 yuan per mu. Including the labor cost, agricultural machine services cost and other expenses, the total cost of wheat is nearly 400 yuan per mu, and the rice is around 600 yuan per mu. With this set of production criteria, the tenant farmers can gain a stable yield in the average year: the wheat yield is about 550-600 jin per mu, while the rice yield is about 1200 jin per mu. Between 2014-2015, the wheat and rice purchasing price in P township are 1.1 yuan and 1.4 yuan per jin respectively. Therefore, the gross income of wheat is 632.5 yuan per mu, and the rice is 1,540 yuan per mu. Generally, the gross income of the rice can meet the total production cost and the land rent. So, the annual income of the tenant farmers is just about the gross income from wheat.

With a reasonable choice of planting structure and the appropriate scale of operation, the tenant farmers use the family labor fully and greatly reduce the demand for agricultural workers. Besides, they also have grasped a set of agricultural production and farm management experiences. Therefore, the tenant farmers gain a maximum profit on the basis of stability. The land deserted by capital can create profit now. Obviously, it is the tenant farmers who have saved and revitalized the emerging land circulation market in P township, which is also recognized by the locals. "At the beginning of land circulation, there is no one who wants to transfer the land. In fact, if without the tenant farmers from Chaohu, the

land here is not valuable. It is the Chaohu guys that driving up the development here" (Sun Wenqiang).

The Success of the Second Time

The success of the tenant farmers has attracted the attention of the scale farmers, who came forward to learn from their experience. A local villager gave an appropriate summary of this, "the big households are learning the expertise of farming" (Yu Shunting). This learning process can be shown from the following:

First, the planting structure on the scale farms changed into "rice/wheat" combination. Capitalist farmer Yang Chunfeng stated: "The demand of labor is great during the *shuangqiang* season of the double-cropping. If the laborers cannot keep up, then you will miss the time and finally affect the output. So, I chose the rice/wheat planting structure, where there is no need to experience the *shuangqiang* season". The changing of the planting structure helps the scale farmers to be free from the *shuangqiang* issue. Besides, it also creates a different period between the scale farmers' production and the SSFs' production, which ensures the former ones can obtain laborers from the latter.

Second, seeking appropriate scale of operation. As mentioned above, the tenant farmers' farm scale usually is between 200-300 mu. Under this appropriate farm scale, the tenant farmers can manage their farms smoothly with one couple plus a few agricultural workers. This characteristic has been learned firstly by Yang Chunfeng. When entering into agricultural production for the first time in 2009, Yang directly managed his large farm with hired agricultural workers. Luckily, the large scale of double-cropping rice did not bring a huge loss to him. "There is no profit by planting double-cropping rice. I didn't lose money, just kept breakeven". In 2011, Yang changed the planting structure on the farm, as well as the form of

farm management, namely, from the large scale to appropriate scale. According to the water conditions, he divided his farm into three parts, the area of each part is about 290 mu. "I divide the 875 mu of land into three parts. And each part is managed by an agricultural workers' team. Each team is led by one worker captain. I choose the regionalized management, due to one workers' captain who cannot manage the whole 875 mu reasonably". In effect, this division transformed a large scale farm into three appropriate scale farms. With the change in crop structure and management mode, the agricultural production and farm management efficiency of Yang's farm has soared rapidly. Now, Yang is the largest capitalist farmer in P township, who does not subcontract the land and manages the whole farm directly by himself.

Third, purchasing the farm chemicals and seeds together with tenant farmers. In A, B, C villages, 8 PCFs buy the farm chemicals from Chaohu through a tenant farmer. The two PCFs I interviewed both gave a high praise for these farm chemicals. "The farm chemicals … are bought from Chaohu … are more advanced and numerous in variety … Here, about 4 or 5 farmers buy farm chemicals from Chaohu through Sun Ben … we use the foreign farm chemicals with longer efficacy" (Sun Wenqiang); "The farm chemicals are all bought from Chaohu by Sun Ben. Relatively, those farm chemicals have good efficacy. Secondly, the price is cheaper, even including the freight charge … The farm chemicals from Chaohu are very good, and the efficacy is longer. I usually spray once in two weeks" (Gui Jin). Some local scale farmers also asked the tenant farmers to buy the seeds. In April 2015, when I was interviewing two tenant farmers, Liu Min, a local CF, called these two tenant farmers to ask whether they could help to buy rice seeds from Zhejiang province.

Fourth, learning from the tenant farmers' experience of agricultural production and farm management actively. "I learn the expertise of farming from Sun Ben" (Gui Jin). Some scale farmers tried to make friends with the tenant farmers and learn

their experiences. A tenant farmer told me a case. "Last year (2014), Xiao Deng (a grain trader) gave me a call. He told me that the accountant of his village (Liu Min) ran a farm with 400 mu of land, who wanted to invite me to have a dinner, and then expect me to teach some skills and experiences. Why find me? Because we cultivated the abandoned fields so well. Xiao Deng heard the news and told to Liu Min. Then, Liu Min asked Xiao Deng to find me. I agreed. It's ok to help each other when we have some problems with the farming" (Wan Xing).

The capital entering agricultural production that failed the first time, finally led to the land being subcontracted to tenant farmers. After some years of "learning the expertise of farming". The capital again tried to back to enter agricultural production. Without the end of the subcontract, some agricultural capitalists already expected to take the land back from the tenant farmers. Chen Fuwei is one of them. In 2011, Chen subcontracted 638 mu of land to the tenant farmer Mu Hongcai. Mu cultivated the deserted fields very well by virtue of his rich experience. When he saw the fields could create wealth now, Chen Fuwei asked Mu Hongcai to return the land. At first, Mu refused directly. But after some time, Chen asked again. At this time, Mu reluctantly agreed to give back 120 mu of land to Chen. When I interviewed Chen Fuwei in 2015, he was running a farm with 120 mu of land. I asked him why he was so keen to get the land back at that time. He answered: "Because except for farming, I do not have other work to do. If I change my career, it will not necessarily be successful. Farming is relatively stable. Now, I have machines, also I have experience ... The Chaohu farmers have experience ... if learning with them, you can catch up with them in 1 or 2 years" (Chen Fuwei). Recalling the failed experience, Chen Fuwei thinks the main reason was that "(I) didn't have the experience, didn't know how to arrange the farm work ... mainly didn't grasp the mode". In the interview, Chen repeatedly mentioned the word of "mode". The meaning of the "mode" in his words is that "the scale operation of agriculture is totally different from the management when you cultivate your own 7 or 8 mu of land. It is impossible to do like the original

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practices. When you cultivate 7 or 8 mu of land, you still will be weeding in the fields personally; when your farm scale is up to 100 mu of land, you will not be weeding in the fields". This, in fact, is the experience of agricultural scale management.

After some years, the scale farmers just like Chen Fuwei have learned the experience of agricultural scale management from the tenant farmers. To some extent, it was the time that Chen Fuwei tried to practice the experience or "mode" learned from tenant farmers, when he got back 120 mu of land from Mu Hongcai. At this time, he succeeded. Now, Chen can gain an annual revenue of 50,000-60,000 yuan from the 120 mu of land. When I asked him how much land he would like to transfer in the forthcoming second round of land circulation in P township, Chen frankly said: "I think 200-300 mu of land is fine; more land does not mean more money. You can earn 500 yuan per mu does not mean that you can earn 50,000 yuan from 100 mu of land. There is no proportion between the scale and revenue. Sometimes, you might lose money if you cultivate too much land". When I was back to P township in 2016, I found Chen Fuwei had transferred 200 mu of land in the second round of land circulation, which proves that he has already mastered the appropriate scale and the agricultural management mode and re-entered agricultural production successfully.

It is a very special case that Chen Fuwei took back the land before the end of the subcontract. However, it is universal that the intention of the capital is expecting to re-enter agricultural production following this special case. Obviously, the mode and experience of agricultural scale management from the tenant farmers has helped capitalists to overcome the obstacles of entering into agricultural production. The appropriate mode has been popularly adopted by scale farmers in P township, which can also be seen from the changes in land circulation and agricultural production after 2011 in P township. From 2012-2015, about 18,394.66 mu of land has been transferred to 69 agricultural producers, in which

16 producers' farm scale exceeded 300 mu of land, and 53 producers' farm scale was between 100-300 mu of land. Among the former 16 producers, no one adopted the original model of large-scale management, but only the regionalized management mode. With this change, the absolute number and relative proportion of subcontracts have both decreased: the subcontract has been reduced in number from 17 before 2012 to 8 after 2012. In addition, this appropriate scale management mode even has affected the local agricultural policy in P township. The director of Agriculture Office in P township stated that most of the land transferred after 2012 was between 150-300 mu.

"The large family farm is 300-400 mu of land. Liu Min transferred the land early, so his farm scale exceeded 400 mu of land. But afterward, the scale was not allowed to exceed this area in principle. If having the ability, some 'big households' can integrate together. But usually, they are not willing to integrate into such large scales. The production cost of rice is high, which brings some troubles to this kind of integration. Now, the farm scale is basically between 150-300 mu of land. At the initial stage, the scale is much larger".

If taking the subcontract as a process of "learning the technique of farming" from the tenant farmers, then after learning the "technique of farming", capital has begun to exclude the tenant farmers. In 2016, when I went to visit the original settlement of the tenant farmers, it was already empty. In the second round of land transfer in three villages, there was already no place for the tenant farmers. It reminded me of a passage that a tenant farmer had once said to me:

"Now they see that we can make some money from farming, and they learned our technique, so they want to cultivate the land by themselves. It is definitely a kind of local protectionist policy. The local government says that the local people first. If the local people are not willing to cultivate the land, then it's the non-locals' turn. If they are willing to cultivate, the land is transferred, then our non-locals have to get out and go home" (Zheng Guifu).

The whole changing process has shown that due to the limitations of many factors, capital entering into agricultural production was not an easy process, not overnight, but rather an iterative and incremental learning process. Because of the issues of planting structure, lack of the awareness to agricultural particularities and without the experience of scale management, capital has failed to establish successful agricultural production the first time. However, the scale farmers learned the planting structure and the experience of moderate scale management from tenant farmers, and have successfully overcome the barriers to entry into agricultural production. This mode might not allow capital to gain maximum profit, but it can ensure that capital can gain a guarantee and modest profit from agricultural production and established a foothold.

A Comparative Analysis Among New Subjects of Agriculture

In this section, the agricultural operation of the four types of NSAs will be analyzed comparatively. We have studied the real situation of land distribution, but it is not enough to explain the relations of production in agriculture, thus we still need to analysis the agricultural operation to explore whether the agricultural productivity is developing or not (Qian, 1935:91). I will inspect the composition of the production costs first, and then compare labor productivity on the farm. From these two aspects, I intend to demonstrate that the capitalist mode of production has already holds a dominant position in agricultural production, and the capitalist relations of production has promoted the rapid development of agricultural productivity.

The Composition of the Production Costs

There are two kinds of planting structures in P township, namely, "rice/wheat" and "double-cropping rice". As the former one does not create labor pressures between the two crops, it is adopted by the CFs and PCFs generally; the SSFs often choose the latter one. The MFs, in general, select both.

NSAs	Wheat	Medium rice	Early rice	Late rice
CFs	548.2	1059.1	0	0
No.	11	11	0	0
PCFs	584.2	1101	810	900
No.	24	24	5	5
MFs	590	1109	850	1033.33
No.	10	10	9	9
SSFs	629.3	1115.45	880.69	1032.76
No.	10	11	29	29

Table 5.1 The per unit area average yield in four kinds of farms (jin/mu)

Date source: Author's fieldwork

Table 5.1 shows the per unit area yields of four types of crops in the four kinds of farms. Looking through the table, we can find that the SSF basically has the highest per unit area yields in all types of crops, except the late rice. For pro-peasant advocates, this result is enough to make them justified, because it has been demonstrated that the MFs and SSFs adopting the production mode of peasant family farming are the most productive agricultural producers. However, I argue that when they make this judgment their studies actually are moved back to the "Buck Stage" of the Chinese Rural Studies, namely, they only care about "under what technological conditions, the agricultural producers can utilize the nature most effectively … (the object of their study) is not the social relations between people, but the technical relations between human and nature" (Qian,

1983[1935]:99-100). Their purpose is to find which forms of agricultural production are the most advantageous. However, there are two issues. One is that we still do not know the specific reasons resulting in this difference in yields. The other one is that this analysis does not help us to know the changes taking place in agricultural production relations.

NSAs	No.	Total area (mu)	Total cost (yuan)	Average cost on each farm (yuan)	Average cost of per mu (yuan)
CFs	11	5855	5,342,910	485,719.1	929.3
PCFs	24	4279.97	4,047,798.6	168,658.3	937.6
MFs	11	527.8	396,749.8	3,3068.2	733.8
SSFs	34	335.8	255,503	7,514.8	730.8

Table 5.2 The synopsis of the production cost in four kinds of farms

Note: the total agricultural production cost does not include the depreciation expenses of the production tools and family labor input.

Further, we explore the composition of the agricultural production costs in four types of NSA's farms by looking at the overall situation. It clearly shows that the production cost of each NSA is already considerable, which apparently has resulted from the commercialization of agricultural production (Table 5.2). Especially the CFs and PCFs, the former one averagely spends more than 485, 000 yuan per year per farm, while the latter one also needs almost 170,000 yuan in average. This once again shows the high intensification of capital in their farming operation. While the second two categories of farmers spend much less, each of the MFs spends 33,068 yuan per year, and the SSFs only 7,514 yuan. As for the production cost per mu. Overall, the production cost per mu is relatively high in all four types of NSAs. To be specific, the average cost per mu of the first two categories of farmers is about 930 yuan, while that of the second two categories of farmers is about 730 yuan, a difference of about 200 yuan per mu. So, where does the difference of 200 yuan per mu come from? It requires a look through the main production costs one by one, including, plowing, seeds, fertilizer, farm chemicals,

harvesting and hiring cost.

Plowing Cost

NSAs	Total cost (yuan)	Each farm (yuan)	Per mu (yuan)	The proportion of total cost of per mu
CFs	323,900	29,445.5	55	5.92%
PCFs	278,025	11,584.4	61.2	6.53%
MFs	15,000	1,363.6	22.4	3.05%
SSFs	5,957	175.2	19.1	2.61%

Table 5.3 The plowing cost in four farms

The first two categories of farmers pay much higher plowing fee than the latter two categories. The difference arises mainly because the farm scale of the latter two farmer categories is relatively small. They generally use their own small tractors to prepare the land. While the CFs and PCFs' farms are relatively large, thus they should hire the professional tractor service. As to why the CF cost less than the PCF, it's mainly because the former one's farm scale is larger than the latter one, thus, the former one is possible to obtain a favorable price from the tractor drivers. The difference in the plowing cost is one of the reasons causing the difference in the total cost of per mu, but is not an important one due to its small proportion in the total cost of production per mu.

Seed Costs

On the cost of seeds per mu, it is still higher for the first two categories of farmers than the latter two types of farmers. Although there is a difference, the One-Way ANOVA displays the difference is not significant. In this regard, I argue that there exists no significant difference in the cost of seeds per mu among the four kinds of farms. In fact, some of the MFs and SSFs in P township still breed the seeds by themselves, e.g. there are 8 SSFs self-reproducing the seeds in the 29 SSFs planting the early rice. It means that the seeds in the former two farms are all purchased, while in the latter two farms they are not. However, the cost of seeds per mu is not significantly different in the two sides, which suggests that the seeds price per unit paid by the MFs and SSFs are much higher than the CFs and PCFs.

Table 5.4 The seed cost in four farmers' farms

NSAs	Total cost	tal cost Each farm		The proportion of total
	(yuan)	(yuan)	(yuan)	cost of per mu
CFs	628,861.3	57,169.2	108.4	11.66%
PCFs	540,629.1	22,526.3	127	13.55%
MFs	57,153.6	5,195.8	103	14.04%
SSFs	37,459.1	1,101.7	102.8	14.07%

Fertilizer Cost

NSAs	Total cost	otal cost Each farm		The proportion of total
	(yuan)	(yuan)	(yuan)	cost of per mu
CFs	1,733,563.8	157,596.7	303.7	32.68%
PCFs	1,444,964.4	60,206.9	330.8	35.28%
MFs	170,260.7	15,478.2	322	43.88%
SSFs	98,025.6	2,883.1	286.2	39.16%

Table 5.5 The fertilizer cost in four farmers' farms

Similar to the cost of seeds, there is no significant difference in the fertilizer cost per mu between the four types of NSAs. However, no significant difference on the surface cannot hide some inherent differences. The two main fertilizers used in P township's agricultural production is urea and compound fertilizer. In general, the market price of urea is 90 yuan/50 kg. The compound fertilizer has a low-grade and a high-grade. The market price of the low-grade compound fertilizer is 120 yuan/50 kg, while the high-grade one is 180 yuan/50 kg. However, due to the large amounts involved, the CFs and PCFs always can gain a preferential price from the dealers. So, for these two kinds of farmers, the urea price can be reduced to 85-88 yuan/50 kg, while the low-grade and high-grade compound fertilizer may drop to 100 yuan/50 kg and 155-165 yuan/50 kg respectively. By contrast, the MFs and SSFs still pay the market prices.

The CFs and PCFs mainly use the urea and high-grade compound fertilizer. In general, the usage amount of the urea is about 50 jin per mu, while the compound fertilizer is about 70-80 jin per mu. The limited use of fertilizer is to save the fertilizer cost on the one hand, and on the other hand, to save labor costs. By contrast, the MFs and SSFs mostly use urea and low-grade compound fertilizer. In general, the usage amount of the urea is about 100 jin per mu, while the compound fertilizer is about 100-120 jin per mu in these two types of farms. Xu Feng, an SSF in G village, told me, "I use at least 200 jin compound fertilizer per mu, that is, two bags. Without 2 bags of fertilizer, there is no yield. No fertilizer applied per mu in the MF and SSF's farms is more than the CF and PCF's farms, which can explain why the per unit area yield in the MF and SSF's farms is higher than the CF and PCF's farms.

With reference to the column of proportion in Table 4.5, we find that the fertilizer cost accounts for the highest proportion of the total production cost per mu in all four types of farmers. It means that whether capitalist agricultural production or peasant family agricultural production, they both have become dependent on petrochemical agriculture relying on large amounts of fertilizer input. Obviously, this kind of agriculture not only causes a great pressure on the operational costs of the agricultural producers, but also creates a significant adverse impact on the ecological environment.

Farm Chemicals Cost

Farm chemicals fall into two categories – herbicides and pesticides (fungicides). In the agricultural production of P township, the general operating procedures are: wheat needs to be sprayed with herbicide once, and fungicide twice. As for the early rice, it only needs herbicide spray 3 times, and no pesticide. Depending on the weather, the medium rice and late rice both need more farm chemicals. Herbicide generally needs to be sprayed 3 times, while pesticide at least 3 times, sometimes even as much as 7-8 times.

NSAs	Total cost	Each farm	Per mu	The proportion of total
	(yuan)	(yuan)	(yuan)	cost of per mu
CFs	1,172,965	106,633.2	204.5	22.01%
PCFs	905,225.9	37,717.7	208.4	22.23%
MFs	95,967.5	8,734.3	181	24.67%
SSFs	65,051.3	1,913.3	185	25.31%

Table 5.6 The farm chemicals cost in four farmers' farms

In order to save labor costs, the CFs and PCFs are usually inclined to use the expensive foreign farm chemicals with a good efficacy. These two kinds of farmers consider that, as long as the efficacy of the farm chemical is guaranteed, even if the price is high, the increased chemical cost can be balanced by the savings in labor costs. By contrast, the MFs and SSFs mostly use the domestic farm chemicals, which are relatively cheap, but its efficacy is weak. When planting medium rice, the MFs and SSFs need to spray insecticide at least 5 times. Therefore, although the farm chemical cost per mu between the four types of NSAs shows no significant difference, the farm chemicals they used is different in quality, and the labor input is also different.

Harvesting Cost

Table 5.7 shows that the harvesting cost per mu between CFs and PCFs has no significant difference. In P township, these two scale types of NSAs usually do not buy their own harvester based on the consideration of the economic effectiveness, but directly purchase harvesting services. Because of their relatively large scale farm, the price provided by the agricultural machine servers will be more favorable.

NSAs	Total cost	Each farm	Per mu	The proportion of total
	(yuan)	(yuan)	(yuan)	cost of per mu
CFs	639,000	58,090.9	108	11.62%
PCFs	450,324.2	18,763.5	104.4	11.13%
MFs	45,168	4,106.2	82.9	11.30%
SSFs	44,310	1,303.2	130.7	17.88%

Table 5.7 The harvesting cost in the four farmers' farms

The most significant difference exists between MFs and SSFs. The harvesting cost per mu in MFs is the lowest, while the SSFs it is the highest. In P township, the MF farmers are the providers of harvesting services at the same time as running their own farm. Among the 11 MFs, there are 5 harvesting service providers. For SSFs, they also need to purchase harvesting services. But different from the CFs and PCFs, the small plots of land cannot help the SSFs to obtain a favorable price, and SSFs are charged a higher harvesting fee.

Hiring Costs

It is very clear that there exists a very significant difference between the four types of NSAs in terms of the cost of hiring labor. The hiring cost per mu is directly proportional to the farm scale – the larger the farm scale, the higher the hiring costs and its proportion of total farm production costs. Of course, this statistic does not mean that CFs and PCFs' farms need more labor per unit of land than the MFs and SSFs' farms. Rather, it means that the CFs and PCFs' farms rely more on hired labor in the daily management of their operations, while the MFs and SSFs' farms rely more on their own family labor. This also clearly indicates that the CFs and PCFs, and the MFs and SSFs already belong to two different kinds of agricultural production modes.

NSAs	Total cost	Each farm	Per mu	The proportion of total
	(yuan)	(yuan)	(yuan)	cost of per mu
CFs	844,620	76,783.6	149.6	16.10%
PCFs	428,630	17,859.6	105.7	11.27%
MFs	13,200	1,100	22.5	3.07%
SSFs	4,700	117.5	7.1	0.97%

Table 5.8 The hiring cost in four farmers' farms

From the above discussion, I have argued that there exists no significant difference between the four types of NSAs in seeds, fertilizer, farm chemicals and harvesting costs per mu. There is a significant difference in plowing cost, but due to its proportion, it is not the main reason causing the difference in the production costs per mu between four types of NSAs. By contrast, the hiring cost is different. As for the scale farmers, the proportion of the hiring cost is high; while for the smaller farms, the proportion is low. Obviously, the difference in the hiring cost is the most important reason for a significant difference between the CFs and PCFs, and the MFs and SSFs.

Instruments of Production

Table 5.9, as expected, shows that the larger scale farmers own more instruments of production than the smaller farm operators, either in quantity or in the corresponding value of the instruments of production. The only exception is the larger than expected level of mechanization MFs own harvesters for custom work.

Even without this, there is a very significant difference between the former two larger farms and the latter two smaller farms in terms of agricultural instruments. It also shows that the intensification of capital in the CFs and PCFs' farms is higher than the MFs and SSFs' farms.

	CFs	PCFs	MFs	SSFs
Big tractor	6	10	4	0
Small tractor	6	26	15	30
Harvester	0	2	5	0
Big sprayer	29	27	1	0
Small sprayer	82	91	23	65
Big spreader	1	0	0	0
Small spreader	58	51	1	1
Pump	71	88	26	35
Planter	2	4	0	0
Total values (yuan)	685,090	1,312,920	633,710	131,820
Per farm (yuan)	62,281	54,705	57,610	3,877

Table 5.9 The instruments of production and their value in four farmers'

farms

In addition, the larger farms have high use efficiency of the agricultural instruments than the smaller two kinds of farms. Taking a small sprayer and pump as examples, from CFs to SSFs, a small sprayer can cover an area of land 71.4 mu, 47 mu, 22.9 mu and 5.2 mu respectively; the pump can cover an area of land 82.5 mu, 48.6 mu, 20.3 mu and 9.6 mu. Obviously, this represents the superior technical capacity of the CFs and PCFs' farms.

In the above six major agricultural production costs, the proportion of the costs of seeds, fertilizer and chemicals in the total production cost per mu respectively account for 66.35% (CFs), 71.06% (PCFs), 82.59% (MFs), and 78.54% (SSFs). It shows that there has no significant difference in investment in agriculture production material costs in the four types of NSAs' farms. Further, it reflects that

the commercialization of agricultural production in China has been very high --Chinese agriculture has become a capital-intensive business. The four types of NSAs are already inseparable from the market, but due to differences in farm scale, the CFs and PCFs are able to occupy a more favorable position in the market, while the MFs and SSFs have to accept a passive position. In addition, the CFs and PCFs are clearly higher than the MFs and SSFs in the input and usage of agricultural instruments. Although the plowing and harvesting have been mechanized, the MFs and SSFs still mainly use some simple and small agricultural tools in the daily operations of the farms. It is indicated that the CFs and PCFs with capitalistic natures are higher than the MFs and SSFs in agricultural productivity. Last but not the least, the biggest difference is in the role of labor. The CFs and PCFs mainly rely on hired laborers, while the MFs and SSFs depend on family labor, which makes it necessary to further explore the issue of labor in the four types of NSAs' farms.

Labor Productivity and Farm Income

Labor Productivity and Income

NSAs	Area of land per	Number of labor	Income per	Income per labor
	laborer (mu)	days per mu (gong)	mu (yuan)	day (yuan)
CFs	109.75	3.4	1066.33	502.99
PCFs	81.06	2.7	1237.99	458.51
MFs	25.39	8.1	1431.37	177.37
SSFs	7.9	18.9	1193.95	63.17

Table 5.10 The labor productivity and income in four farmers' farms

Note: The land rent is not subtracted in the income per mu of capitalist farmers, petty-capitalist farmers, and medium farmers because it belongs to unproductive expenditure.

First, from the column of "area of land per labor" in Table 5.10, we can see that the area of land per laborer is proportional to the farm size: the larger the farm size, the more area of land per labor cultivated. The labor productivity in the two larger kinds of farms is much higher than the latter smaller farms. The area of land per labor cultivated in the CF's farm is 4.3 times more than the MF's and nearly 14 times more than the SSF's. Similarly, the area of land per labor cultivated in the PCF's farm is 3 times more than the MF's and is 10 times more than SSF's.

Secondly, the data in the column of "labor input per mu" shows that the number of labor inputs per mu of land is reduced with the increase in farm scale. Specifically, there is a difference between CFs and PCFs, but not significantly, about 3.4 gongs labor days are used in one mu of land in CFs' farms while about 2.7 gongs labor days in PCF farms. One mu of land in MFs' farms needs about 8.1 gongs labor days, which denotes an obvious difference with the former two kinds of farms. One mu of land in SSFs' farms needs as many as 18.9 gongs labor days, much more than the other three types of farms. In general, more labor is used in agricultural production in the SSFs and MFs' farms than in CFs and PCFs' farms, which can also be account for the high yield per mu in the SSFs and MFs' farms.

Thirdly, regarding the "revenue of per mu". The MFs' farms have the highest revenue per mu, largely because of their relatively intensive labor inputs and the self-owned agricultural machines. There exists a difference between the other three types of farms, but not significantly. Especially the SSFs, although they have a much higher yield per mu than the other types of farms, labor has not brought them the highest revenue. In this sense, it once again reflects the weak position of the SSFs in the grain sale market. While for the CFs and PCFs, they obviously can obtain a stable but not low revenue from their agricultural production.

Fourthly, I examine the revenue of labor input for the four types of farms. The data shows the larger the farm scale, the higher the revenue of labor input. There exists a significant difference between the larger two types of farms and the smaller two types of farms. The revenue of labor input in the CFs and PCFs' farms is 2.5 times higher than the MFs' farms, while 7-8 times higher than the SSFs' farms. Obviously, the revenue of labor has been diluted by the intensive labor inputs.

Finally, I analyze the organic composition of capital in the four kinds of farms. If we ignore the wage that family labor deserves, then we will make a big mistake. I calculated the "labor cost" through the "labor input per mu" in Table 5.10 and multiplied it by the average labor wage of 100 yuan per gong. Then using the "total cost per mu" in Table 5.2 to subtract the "hiring cost per mu" in Table 5.8, I obtain the "other material cost". From Table 5.11, it is found that a more backward the agricultural operation (MFs and SSFs), the higher the labor cost and its proportion in total capital expenditures.

In summary, there is a significant difference between the four kinds of farms in terms of agricultural inputs, while there is no significant difference in the agricultural material inputs. The labor input in the CFs and PCFs' farms is much lower than the MFs and SSFs' farms, which is represented in the organic composition of capital expenditures. Clearly, the CFs and PCFs' farms have much higher labor productivity than the MFs and SSFs' farms, the former ones have the more advanced forms of agricultural production.

NSAs	Labor cost	%	Other material costs	%
	(yuan / mu)		(yuan / mu)	
CFs	340	30	779.7	70
PCFs	270	25	831.9	75
MFs	810	53	711.3	47
SSFs	1890	72	723.7	28

Table 5.11 The organic composition of capital in four farmers' farms

Reasons for the Difference

The higher labor productivity of the CFs and PCFs' farms is mainly represented in two ways: first, one male laborer can cultivate much more land in the CFs and PCFs' farms than the MFs and SSFs' farms; second, per unit of land, on the larger two types of farms, can be cultivated with fewer labor days than the smaller two types of farms: about an average 3.05 gongs, as opposed to an average 13.5 gongs, as shown in Table 5.10.

As for the reason of the first difference, Philip Huang (1985:159) argued that "the disparity of work 'years' helps to explain why the hired year-laborers farmed more cultivated land on average". The problem, however, is that he did not explain why there is "the disparity of work 'years" between the different farms. I argue that the fundamental reason of the difference actually lies in the uneven distribution of land management rights. Table 4.1 shows the difference in the farm size: the SSFs' farms only have 9.88 mu of land on average, and the scales of MFs' farms are 47.98 mu, while the PCFs and CFs' farms have an average of 178.33 mu and 532.27 mu respectively. Therefore, the laborer on the MFs and SSFs' farm, in any case, will not farm much more land than the laborer on the PCFs and CFs' farm, because the labor productivity on the small farms is greatly limited by their farm size. The small farm size of the MFs and SSFs cannot completely use all the labor days that their families can provide; while the labor demand on the large farm size of the PCFs and CFs cannot be met by their family labors, assuming that the family labor is inputted into the agricultural production. That is why the CFs and the PCFs mainly rely on or cannot do without the agricultural workers, and the MFs and SSFs mainly use family labor and sometimes even need to sell their own labor.

As for the second difference, Philip Huang (1985:159-168) noted that the reason does not lie in the "higher efficiency of team-farming on the managerial farms", but in "the small farms' overuse of labor", namely, the peasant family farms

continue to invest a lot of labor days on their small plots of land.¹⁰ So, in Huang's opinion, this difference is not the reflection of higher labor productivity, rather the seemingly higher labor productivity on the managerial farms, resulting from the overuse of labor on the peasant family farms. Huang did not confuse the issues of 'absolutely higher' and 'relatively higher', however, he definitely made a wrong judgment due to a wrong reason. He suggested that "team-farming with four to eight men had no intrinsic advantages over individualized family farming, so long as the small farmers could join forces when team-work was required" (ibid., 161). With this simple reasoning, Huang denies the higher labor productivity of collectivized farming. In fact, other scholars have pointed out that the scale of mutual cooperation between small farmers was very limited before the Liberation, most of the small farmers were still farming with family labors only (Zhu, 1957). On the other hand, even though there existed mutual cooperation between small farmers, the degree of proficiency of cooperation cannot be compared with the agricultural workers' team on the large farms. Therefore, the difference in the labor productivity between the large and small farms should be explained respectively. Here, we should explain why the labor productivity in CFs and PCFs' farms is high, and why the labor productivity in MFs and SSFs' farms is low. These are absolute issues, not relative ones.

¹⁰According to the understandings of scholars of Chavanovism, the labor intensive small farms should have a higher yield per unit than the large farms. However, a paradox phenomenon, in North China in the 1930s, is that there is no higher land productivity on the small farms than the large farms. For the reason of this paradox, Huang (1985:161-168) attributed it to the "poor peasant deviations from optimal patterns". To be specific, the poor peasant adopted two different cropping patterns: one is the "less well-balanced cropping patterns", another one is the patterns of "intensified labor input on a given crop to abnormal levels". In the former pattern, the lower intensified labor input leads to the lower yield, while in the latter one, the higher intensified labor input creates the higher yield. The average of these two yields on the poor peasant farms is no significant difference with the managerial farms. However, I argue that there are two major questions in Huang's analysis. Firstly, he has not questioned the assertion that the higher intensified labor input must cause the higher yield of per unit. This is also why Huang regarded it was a "paradox" when he found there was no difference in yield of per unit between small and large farms. Secondly, I also doubt the biological reason, the selection of the two cropping patterns by the poor peasants, that Huang identified. According to the discussion of the "China Rural School" (Zhongguo nongcun pai) in the 1930s -1940s, we know that the nature of Chinese society at that time is "semi-colonial, semi-feudal". So, the development of the agrarian capitalism was tightly constrained by the foreign capital and the domestic feudal landlord economy (Xue & Feng, 1983:116-242). In this sense, I argue that the analysis of the managerial farms and peasant farms, and the interpretation of the above phenomena, should take the political and economic environment into consideration, rather than merely consider a biological factor.

Based on the investigation in P township, I suggest that there are mainly two reasons that explain the higher labor productivity on the CFs and PCFs' farms than on the MFs and SSFs' farms.

First, different levels of agricultural mechanization. The mechanization level in the CFs and PCFs' farms is much higher than the MFs and SSFs' farms. As shown in Table 5.9, the large and middle agricultural machines were used on the CFs and PCFs' farms, while the MFs and SSFs mainly adopt small agricultural machines and some simple production tools. The different levels of agricultural mechanization result in the different labor productivities. For example, a large tractor can plow the cultivated land about 80-100 mu per day, while a small tractor can only plow about 5-6 mu of land per day. A large sprayer jointly operated by three workers can cover near 150 mu of land per day on wheat and 100 mu of land per day. Besides, CFs and PCFs mainly use large water pumps (6-inch, 8-inch), which have higher irrigation efficiencies than the small water pumps (4-inch) mainly used by MFs and SSFs. Obviously, the adoption of large agricultural machines greatly reduces the agricultural labor time required on the CFs and PCFs' farms. In my interview, a CF proudly told me that,

Now, I only require 3 fixed year-laborers and some casual laborers to run my farm. It is enough for me to input 1 gong labor day per mu in the whole year. The price of labor has risen from 80 yuan per gong last year to 100 yuan per gong this year, but it does not create a pressure for me. Because I mainly rely on agricultural machines. (Yang Chunfeng)

The second reason, also the more important one, is the collaborative form of labor. At the thirteenth chapter "Co-operation" in Capital I, Marx (1990: 443) stated that "when numerous workers together side by side in accordance with a plan, whether in the same process, or in different but connected processes … a new productive power, which is intrinsically a collective one" will be created. Thus, the laborers in the combined form of labor have much higher labor productivity than the isolated laborers. Furthermore, Kautsky (1988 [1899]:100-101) stated in detail, "[t]he large farm can take much better advantage of the benefits of the division of labor than the small. Only large farms are able to undertake that adaptation and specialization of tools and equipment for individual tasks, which render the modern farm superior to the pre-capitalist … As a result of the division of labor and the greater size of the farm, the individual worker will spend longer on each job, and will therefore be able to minimize the loss of time and effort associated with constant switching of tasks or workplaces. Finally, the large-scale farmer also has access to all the advantage of cooperation, of the planned collaboration of a large number of individuals with a common objective."

In P township, the CFs and PCFs' farms adopt the collaborative form of labor, while the MFs and SSFs' farms still employ the isolated form of family labor. When you go to P township in Spring, you will see difference pictures between the large and small farms. On the farms of CFs and PCFs, you will see a large tractor turning over the land; one laborer is watering the field; one or two small tractors are plowing the land; after the field is prepared, some laborers sprinkle fertilizers and sow seeds. All the laborers are working like on an assembly line under the orders of the farmer or the workers' captain. While on the MFs and SSFs' farms, most of the work is undertaken alone. Thus, the labor productivity and work rate on the MFs and SSFs' farms is lower than the CFs and PCFs. I have a deep impression about the above distinction. I have two neighbors in P township: the left-hand one is the SSF Uncle Fu owning 6.6 mu of land, and the right one is the CF Liu Min running a large farm with 404.5 mu of land. Uncle Fu completed the harvesting of early rice on July 23rd of 2015, then finished the planting of late rice on July 30th with only one laborer. Liu Min harvested the wheat between May 25th-27th of 2015, then he completed the sowing of medium rice on June 12th with the collaboration of 7 agricultural workers. Therefore, the labor productivity of collaborative production is clearly higher than the productivity of an individual.

However, Philip Huang (1985:159-161) and Li Huaiyin (2009:274-276) both argued that the mutual cooperation between small farmers can be compared with the collaborative form of labor. However, such cooperation is limited not only by scale – existing only between neighbors and relatives, but also by season – generally in sowing and harvesting. So, the labor efficiency of this temporary cooperation cannot compare with the regular collaboration between a group of workers. Secondly, this cooperation has become extinct under the impact of the market economy. From his research in Southern Jiangxi province, Chen Baifeng (2012:38-39) found that the villagers preferred to hire laborers from the market, rather than ask for help from the neighbors or relatives. In fact, the example cited by Li Huaiyin (2009:274-276) in his book is a case of buying agricultural production services, rather than mutual cooperation.

In summary, it is the different levels of agricultural mechanization and the conditions of labor that cause the different labor productivities on the farms of the four types of NSAs, rather than the overuse of labor on small farms. In conclusion, the CFs and PCFs are much more advanced forms of agricultural production than the MFs and SSFs.

Does the "Twin Crutches" Subsistence Mode Defeat Capitalist Agriculture?

In *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988*, Philip Huang noted a particular phenomenon of China's agricultural production in the Ming and Qing Dynasties, that is, with vigorous commercialization in the Yangzi Delta, "what occurred was not the erosion of the peasant family production unit, but a fuller elaboration and strengthening of it", which presented an opposite tendency to the classical view of Smith and Marx. Huang called this phenomenon "the familization of rural production", namely, "women and children came to take on an increasing share of the household's productive activities" (Huang, 1990:44). "The familization of rural production" became the critical concept in Huang's argument. Furthermore, Huang argued that "the differential strengths of family and managerial farming did not depend on the size of the farm ... what mattered was the degree to which the strengths peculiar to the family work unit were articulated" (ibid., 74). Therefore, "where rural production was highly familized, drawing on the auxiliary labor of women and the old and young, the family work unit easily outcompeted the wage labor-based managerial organization, for the simple reason that auxiliary family labor was much cheaper than hired labor" (ibid., 74). The typical example is in Yangtze Delta. While in the North China plain, the degree of familization of rural production was very low, which "enabled managerial farmers to outcompete family farms" (ibid., 74). Based on this view, the "familization of rural production" has further been refined into the special "twin crutches" subsistence mode, namely, the peasant households had to simultaneously rely on "agriculture" and "family handicrafts or hiring out" to make a living. In Huang's opinion, the "twin crutches" subsistence mode can not only make a persistence of the peasant family-run farming, but also help it to resist the penetration of capitalism.

Consistently, Huang still holds this argument when comes to the contemporary China's agrarian transition. Huang and his partners (Huang, Gao and Peng, 2012:25) argue that, although the new "twin crutches" subsistence mode – "halfworker half-cultivator" – replaced the old one, "the fundamental characteristic of the family unit depending for survival on both its principal and auxiliary labor, engaged in two different kinds of production activities, remains." Therefore, with the influence of the new "twin crutches" subsistence mode, an agricultural proletariat has not emerged in recent China's agricultural development. That is, the capitalization without proletarianization. And eventually, they stated that "'twin crutches' mode of survival – combining farming with handicrafts and/or part-time hiring out – which drove out wage-labor-based managerial farming" (ibid.,24). This argument is also agreed by the scholars of HZXTP.

In terms of Huang's analysis, I agree in part. He correctly found the involutionary nature of the labor usage and the "twin crutches" subsistence mode in peasant family farms at that time. What I disagree about, however, is that he regarded this feature of peasant family farms as the reason that marginalized capitalist farming.

Upholding Chayanov's view, Huang argues that the economic logic of peasant family farms was orientated toward survival under population pressure, rather than profit making. In this sense, either their overuse of labor in the small plots of land or family handicrafts, or going out to sell their labor, both originated from the requirement of survival - "A person nose deep in water ... would do almost anything to rise above the surface" (Huang, 1985:190). Since for the survival reason, the labor should be devoted to sectors or areas with most revenue, but why the labors in peasant family were immoderately inputted in the family farms or handicrafts. If the revenue from the selling labor was higher, why didn't laborers in the peasant family just hire themselves out to earn the high wages? Huang (1990:79) reminds us that "to consider the latter (returns per unit labor), we need to take into account labor input and production costs, and to differentiate between returns per workday, as opposed to returns per work-year, and between income per worker, as opposed to income per household". According to this differentiation, I will compare the corresponding returns from the making of handicrafts, hiring themselves out and the family farm, according to the data in Huang's book.

From Huang's analysis of the poor peasant farms in North China, we can see that the total income of the five poor peasant farms in Michang village was 178 yuan in 1937, the household labor days are 940, thus the average return of per labor day on the farms was 0.19 yuan (Huang, 1985:188, Table 11.2). With handicrafts, the weavers could earn 25 to 50 cents a day after expenses in 1936, which is totally a hunger-level wage (ibid., 193-194). The daily wages of hiring themselves out was 0.45 yuan in Michang village in 1937, and was 0.5 yuan in Leng Shuigou village in 1939. "Day-laborers generally hired out for an average of about 40 to 50 days a year" (ibid., 81). Even so, the wages were still higher than the net farm income (ibid.197, Table 11.5). So, can a peasant household maintain its survival only relying on one kind of work or income? I take a family of three as an example to calculate the necessary cash demands for basic survival¹¹. In North China at that time, an adult laborer's daily ration of food grains was 0.22 yuan (ibid.,188) to 0.25 yuan (ibid.,193), thus a family of three's daily ration of food grains was about 0.55-0.625 yuan,¹² and 200.75-228.125 yuan one year. Obviously, this amount of money cannot be supported solely by anyone's work or income mentioned above, and this indeed is what the peasant households needed to rely in the "twin crutches" subsistence mode to maintain their survival.

Turn to Yangtze Delta. "A spinner's daily earnings amounted to ten to fifteen ounces of rice, which by present-day rations … was only enough to sustain a preteen child" (Huang, 1990:84-85). Cloth weavers can earn "gross earnings of 3.3 to 5.0 catties of rice a day. Deducting the cost … the weaver would net just about twice as much grain as he needed for his own consumption" (ibid.,86). The wage of hiring off farm work is relatively higher. "Male day-laborers were paid one peck of rice for one day's work in transplanting or two days' work in other tasks; women got one peck for three days' shoot pulling. As long-term laborers, children were paid 0.5 shi¹³ of rice a year at the age of twelve, 1.0 shi at thirteen, and 1.5 shi at fourteen and fifteen, compared with 4.0 shi for adult males" (ibid., 66). Clearly,

¹¹In his book, Huang did not present the family demographic situation in North China at that time. So, I use a family of three, a minimum case, to illustrate. This estimation is mainly for the poor peasant households, excluding the proletarianized male agricultural workers.

¹²Child is counted as half of the adult's cost.

¹³A unit of weight had been used in China before Liberation.

the wages of hiring out is higher than that of spinning and weaving. However, Huang argues that "the fact of lower returns per workday in sericulture does not exclude the possibility of increased yearly, as opposed to daily, labor income, and increased household, as opposed to the individual worker, income. A peasant could suffer reduced returns per workday, but attain greater returns in the year by fuller employment" (ibid.,79). In this sense, although the returns per workday of the sericulture and cotton are low, the annual income still has the possibility to be more valuable because of the stability of the work. By the same token, although the wages per workday of hiring out are relatively high, the annual total income is not necessarily higher than the above two jobs due to the instability of the work and fewer jobs. Here is a simple example. There are two jobs, the day payment of the first job is 100 yuan, while the second one is 50 yuan. But the first job can only be done about 50 days, while the second one can be done 200 days. Thus, the total income of the second job is much higher than the first one. For a peasant household trying to maintain survival, it is reasonable to select the second job. For this reason, the peasant households in North China selected to over input their labor in their own small plots of land, while the peasant households in Yangtsz Delta would more likely devote their labor to sericulture and weaving handicrafts. This involutionary phenomenon is clearly a representative of the situation of peasant households with no choice.

Philip Huang establishing the involutionary nature of labor in China's peasant households and their "twin crutches" subsistence mode shows his deep insight. But the validity of his argument does not do this justice. There is already an error when he tries to adopt this phenomenon to prove the firmness and persistence of the peasant family farm, and regard the "twin crutches" subsistence mode as the prime cause of marginalized managerial farms.

In fact, Huang himself has already referred that the roots of the underdevelopment of managerial farms at North China in the 1930s largely lied in their own management modes and the obstruction of the landlordism combined with usury and commerce (Huang, 1985:169-184). While for the decline of managerial agriculture in the Yangtze Delta, Huang also clearly argues that it was mainly due the increased cost of wage labor and the hindrance of the feudal land leasing system. For example, in Suzhou in the late nineteenth century, for a managerial operation of 10 mu rice farm, the net income was 22,000 wen¹⁴, while if it was leased out, it could obtain rents of 22,8000 wen. "The landowner could earn more from leasing out his land than from farming it himself with hired labor" (ibid., 63-69). As for the reasons of high wages of agricultural workers in Yangtze Delta, Huang suggested that "part of the explanation, of course, was the generally higher standard of living and more abundant employment opportunities afforded by the delta's relatively highly commercialized and urbanized economy; equally important, however, was the two-tiered structure of labor in the farm economy, where the women and children absorbed the lower-paying work" (ibid., 65), and "since the low-paying work was absorbed by women and children whose labor was of little opportunity cost, the men could work mainly in the heavier and betterpaying kinds of farmwork" (ibid.,64). But a question is why women cannot work in the better-paying kinds of farm work, and could only engage in the sericulture and weaving work with low returns at home? Huang simply explains "principally because so much social stigma was attached to the hiring out of women" (ibid.,66). But for the peasant families with their "noses deep in water", can they give up any chance to gain more revenue to maintain survival just because of the social stigma? As we have analyzed above, the main reason for the surplus labors in peasant families (mainly women) not hiring out is actually the instability of the work and the lack of opportunity outside the household. It is in this situation that the peasant families had no choice but to input their family labor into their own small plots of land or family handicrafts to get a slow growth in household annual income. Huang himself has already pointed out this reason, "if a peasant family has more labor

¹⁴A monetary unit used in ancient China.

than its farm needs under optimal conditions, and if that labor is unable (or unwilling) to find alternative employment in an already oversupplied labor market, it would be perfectly 'rational' for the family to put this 'surplus' household labor to work for very returns, since such labor has little or no 'opportunity cost' ... such relative surplus labor, when it was unable or unwilling to find an outlet in off-farm employment, often worked for very low marginal returns in order to meet household consumption needs" (ibid.,10-11). Unfortunately, Huang did not have a consistent on this view.

From this perspective, Huang's argument of "twin crutches" subsistence mode of peasant family farms squeezing out the managerial farms has made a mistake of reversing causality logic. I argue that the fundamental reasons caused the insufficient development of the managerial farms are the feudal land system and the imperialist monopoly capital, rather than the peasant farms with overuse of labor. In fact, it is because of the underdevelopment of managerial farms that cannot provide enough work opportunities for the surplus labors in the peasant households, then the peasant households have no choice but to input the surplus labors excessively into their family farms or handicrafts, and further facilitate the formation of the "twin crutches" subsistence mode. Therefore, the high degree of "the familization of rural production" and the "twin crutches" subsistence mode are not the reasons that caused the underdevelopment of the managerial farms, rather the results that brought by the underdevelopment of the managerial farms. Borrowing the words of Marx (1990 [1867]:91), the peasant family farms at that times "suffer(ed) not only from the development of capitalist production, but also from the incompleteness of that development."

I take the example of P township to demonstrate my argument. At the beginning of the reform, most of the laborers in P township still engaged in the agriculture sector, because the government raised the prices of agricultural products to promote agricultural earnings. After 1995, due to the heavy burden of the agricultural tax, the increase in farm production costs and the decline in products' prices a large number of laborers in P township left agriculture and chose to become migrant workers. "Too poor at home forces you to go out to work" is a true portrayal of the peasant households' plight at that time. In 2014, there were 18,713 laborers in total in P township, of which 11,250 hired themselves out as migrant workers, and 7,463 remained in agricultural production. In terms of revenue, the per capita income of the laborers engaged in agricultural production was 12,524.3 yuan, while the migrant workers earned about 48,821.7 yuan. With the relatively higher income from non-farm employment and the adequate nonfarm work opportunities, most of the young and robust laborers in P township preferred to hire themselves out - compared with 2012, the number of laborers engaging in agricultural production decreased to 2,000 in 2014. For women and older laborers, they are not really unwilling to go out, but rather their age and family reasons stop them working in urban areas. Wang Weiping, a villager in A village, had to give up going out as a migrant worker in order to take care of her son. "(I) have no choice, if I could go out, I would have already left", she sighed.

Along with the exodus of large numbers of laborers from agricultural production, the amount of labor per unit of land has been reduced. As for the laborers at home, they can spend a few hours of to complete the farm work with help from the labor-saving production package, agricultural technology, and agricultural machinery. As shown in Table 5.10, the rice farm with double cropping only needs 18.9 gongs labor days per mu, which required many more labor days in the past. Now, the laborers needed are reduced, and the surplus laborers will find jobs nearby. As an agricultural town, P township does not have many labor-intensive factories and enterprises. So, the surplus laborers cannot all be absorbed locally. However, a demand for laborers has emerged in P township with the land circulation and the rise of CFs and PCFs: the middle-aged male laborers are needed on the farms growing field crops, while most of the middle-aged female laborers are needed on farms with vegetables, fruits, and other cash crops. In 2015, the male laborer wage

was 100 yuan per gong on average, while female laborers averaged 70 yuan per gong. Under this situation, the surplus laborers in the low-MF's and SSFs' farms are no longer inputting excess labor in their small plots of land, but can "reasonably" be hired out on the CFs and PCFs' farms. Similar to Huang's argument, today's peasant households in P township cannot maintain the simple reproduction alone by relying on their small plots of land or hiring themselves out as agricultural workers, thus they also adopt the "twin crutches" subsistence mode. Opposed to Huang's argument, however, the "twin crutches" subsistence mode does not function as a hindrance to the development of the capitalist agricultural production, but rather an important prerequisite for the rising prosperity of capitalist agricultural production. The peasant households in P township provide not only the land, but also the laborers to the CFs and PCFs. A small number of peasant households even abandon the farming and transfer out all of their contract lands, after which the whole family is hired out as migrant workers or agricultural workers.

Comparing the two historical pictures, I argue that the emergence of the involutionary labor phenomenon in peasant family farms' in North China and the Yangtze Delta in the 1930s, was directly brought by the underdevelopment of the managerial farms, but more fundamentally resulted from the hampering of foreign imperialism and China's feudal system. While in today's China, the peasant households in P township and other similar areas, have no need to require too many laborers in the small plots of land due to the large numbers of non-farm employment opportunities in urban areas. Some of the peasant households could gradually abandon agricultural production. The change in the income structure of rural households provides an appropriate opportunity for the rise and further development of capitalist agricultural production. Agrarian capitalism will inevitably be on the rise in China.

Summary

In the first sector, I explored the iterative and gradual process of capital entering into agricultural production in P township. At the beginning of land circulation, industrial and commercial capital poured into the agricultural sector and new elites tried directly to manage large scale farming with hired laborers. However, due to the farm cropping patterns and the lack of scale managerial experience, capital entering into agricultural production was a failure at first. To avoid losing money, many new owners subcontracted their land to non-local tenant farmers who with their years of experience in agricultural production and management achieved relative success. This success not only consolidated and stabilized the emerging land transfer market in P township, but also brought the scale managerial experience and the agricultural production expertise to the agricultural producers in P township. During this process, the capitalist farmers and petty-capitalist farmers learned the scale management practices and skills, and then successfully entered into the agricultural production for a second time. The nature of the agricultural production in P township had thus begun to change.

With regard to the query of the pro-peasant scholars and the future of capitalist farmers and petty-capitalist farmers, the second sector gave a response through the survey data. I found that China's agricultural production has been highly capitalized due to the expansion of commodity relations. Four types of NSAs all required a large amount of money to run their farms, which is their common point. The difference lay in the farm labor inputs: capitalist farmers and petty-capitalist farmers without agricultural workers, while the medium farmers and small-scale farmers mainly relied on their family laborers. In the case that there was no significant difference in the land revenue per mu, capitalist farmers and petty-capitalist farmers have much higher labor productivity than medium farmers and small-scale farmers, which mainly resulted from scale

advantages, the higher level of mechanization, and a more rational collaborative form of labor of the former two farmers. I have shown that the capitalist farmers and petty-capitalist farmers can not only persist but also constantly marginalized the medium farmers and small-scale farmers by virtue of these advantages.

In the last section, this chapter includes a dialogue with Philip Huang. This dissertation argues that the underdevelopment of agrarian capitalism did not result from the familization of rural production or the "twin crutches" subsistence mode as Philip Huang has asserted. On the contrary, it was the insufficient development of the capitalist agricultural production that led to the formation of "twin crutches" subsistence mode in peasant households. In present time, it is also impossible for the medium farmers and small-scale farmers to supplant capitalist farmers and petty-capitalist farmers with "twin crutches" subsistence mode. In fact, the proportion of the agricultural income in the total income of peasant households has constantly been reduced with the emergence of a large amount of non-farm employments in urban areas. Due to the better-payments of the non-farm work, some of the peasant households even have begun to give up the agricultural production and transferred out their contract land partly or in whole. So, the "twin crutches" subsistence mode of peasant households will not hinder the development of capitalist farmers and petty-capitalist farmers, but rather create the preconditions for their development: not only the land, but also the much-needed labor.

Chapter 6: The Diversified Strategies of Capital Accumulation

The most important factors of agricultural production in P township – land and labor – had already been commercialized by 2015. Essentially, the capitalist mode of production has been established in the agricultural production of P township. Bernstein (2015:467) reminds us that "one of the problems in assessing the evidence and arguments for each of these forms of 'primitive accumulation' in China is that too often they blur the distinction noted between *initial* formation of the social conditions of capitalist production and *continuing* processes of 'accumulation by dispossession'." In this sense, it seems that the transfer of land usage rights and the free flow of agricultural labor are just two prerequisites for the establishment of capital has gained a foothold in agriculture is another question. This problem involves, whether or not the capitalist mode of production can continue to persist after establishment. In this chapter, I will explore how capital in P township's agricultural production system adopt various strategies to realize capital accumulation.

Capital accumulation will be carried out in a certain social and political environment, but the ways that accumulators access various types of production resources are different. Therefore, the strategies for capital accumulation adopted by different capitalists are bound to be different. This chapter seeks to present that assertion that accumulators will not take a single way of capital accumulation, instead, according to the specific social contexts, they will take diverse strategies to realize their goals. Accumulators not only exist in a single industry or agricultural production sector, but in multiple industries and throughout whole industrial food chain; in this sense, it would be better to use 'class of capital' to summarize these accumulators.

I divide this chapter into three parts. First, I will examine the strategy of capital accumulation in agricultural production, which is the main form of capital accumulation discussed in orthodox Marxist texts. Second, I will discuss capital accumulation in the circulation. Circulation is divided into the upstream agricultural materials sector and the downstream grain marketing sector. If the above two strategies are both the economic means of capital accumulation, then the third one is a non-economic means of capital accumulation. In this part, I will explore how capital accumulation been realized through national agricultural projects. Through the discussion of the above capital accumulation strategies, I will present how capital in P township's agriculture sector realize accumulation and expanded reproduction.

Accumulation from Production

In chapter 5 I discussed how capital entered into the agricultural production sector through a repeated and gradual process. By virtue of the experience learned from non-local tenant farmers, capital can stand firmly in the agricultural production sector. But there still are two questions. First, although capital can keep a foothold in agricultural production, the income of the rice/wheat planting structure is limited, which is obviously an insufficient return to capital. Second, tens of thousands of yuan were invested in agricultural production, but the turnover of the capital was only twice a year, which was not only slow, but also filled with a variety of natural and social uncertainties. So, how to adopt strategies to guarantee a maximum profit and ensure economic stability are urgent problems for capitalists to solve after entering the agricultural production sector. However, there are two important limitations in the agricultural production of P township (and even the whole country), that is, the limitation of land circulation time (5-10 years) and the limitation of agricultural workers' labor time (8-9 hours). Therefore, how to realize the maximum capital accumulation under these two limitations is the question that scale farmers need to overcome.

My fieldwork shows that the scale farmers in P township usually adopt three ways to expand capital accumulation. First, the diversification of product/planting structure. This strategy aims to deal with the limited land circulation time. The diversification of product/planting structure intends to increase the output value of the land and enhance the capacity of risk aversion. With limited labor time, the scale farmers employ two strategies to increase their capital accumulation. One is to increase the supervision of agricultural workers' labor. In order to extract much more surplus value from agricultural workers, the scale farmers will make full use of the time and increase the labor intensity. The other one is to improve farm mechanization and chemicalization, and adopt new agricultural techniques, which can not only reduce the number of laborers and save labor cost, but also can increase the extraction of relative surplus value from agricultural workers. All in all, these three strategies have influenced each other and worked together.

The Diversification of Product / Planting Structure

In general, there are two directions to maximize the output value of land. First, the relative direction, that is to relatively increase the output value of land through reducing the production cost. Second, the absolute direction, namely, make the land output value increase absolutely. Accordingly, the scale farmers in P township mainly adopt the following three ways to increase the output value of land.

The Diversification of Grain Crops

Qian Jinyang, aged 54 years, is a farmer with very rich farming experience. He now operates 203 mu of land, in which 120 mu was transferred in 2012 and 83 mu circulated in 2013. As early as 1999, he had already spontaneously transferred about 30 mu of land for farming. Different from many non-farming capitalists who transferred land blindly, Qian made a detailed estimation of the input-output ratio before he took on land circulation. He told me that:

"I don't transfer land blindly, because the span is too big from 30 mu of land 300 mu … how many labor days needed per mu and how much grain can be harvested per season … I estimate them both carefully. After estimating, I find I can still earn one hundred yuan per mu … I find this ok, so I prepare to transfer some land."

After observing the management of non-local tenant farmers, Qian believes that "the profit of wheat and rice is relatively stable and no risk, but it is low." Based on his own farming experience, Qian developed a new rotation system by combining the "double cropping rice" planting structure and the "rice/wheat" planting structure together.

Figure 6.1 demonstrates that Qian has divided his farm into two parts. In the first half of the first year, he plants 100 mu of wheat in plot A and 100 mu of early rice in plot B. In the second half of the first year, in plot A is planted 50 mu of hybrid rice and 50 mu of late rice, while in plot B he plants 50 mu early-late rice and 50 mu of late rice. Because the hybrid rice (50 mu of land in plot A) and the early-late rice (50 mu of land in plot B) mature early, these two land plots (total 100 mu) are planted with wheat in the first half of the second year in advance, which can ensure an effective growing season of wheat and increase output. Besides, due to the early seeding, the amount of wheat seeds in Qian's farm is 25 jin per mu, which

is significantly less than that of non-local tenant farmers. The late rice will not be harvested until December, so the 100 mu of land (50 mu of land in plot A and 50 mu in plot B) will grow early rice in the first half of the second year. In the second half of the second year, the 100 mu of land in plot A (50 mu wheat and 50 mu early rice) will be planted with late rice, while in the 100 mu of land in plot B (50 mu wheat and 50 mu early rice) will be grown 50 mu hybrid rice and 50 mu early-late rice.

100mu	Plot B e	Plot A 100mu	7
100mu	early rice	wheat 100mu	The First Year First half Seco year half
late rice 50mu	early-late rice 50mu	hybrid rice 50mu late rice 50 mu	st Year Second half year
early rice 50 mu	wheat 50 mu	wheat 50mu early rice 50 mu	The Sec First half year
early-late rice 50mu	hybrid rice 50mu	late rice 100 mu	The Second Year st half Second year half year
mu	wheat 100	early rice 100 mu	The Th First half year
late rice 50 mu	hybrid rice 50mu	early-late rice 50 mu late rice 50 mu	The Third Year st half Second ear half year

Figure 6.1 A Rotation System for Grain Crops

Similarly, due to the different maturation times, in the 100 mu of land in plot B will be grown 100 mu wheat, while the 100 mu of land in plot A will be planted

with early rice in the first half of the third year. By doing this, plot A and plot B will achieve a full rotation of crops in two years.

Because of the different crop varieties, the busy time in Qian's farm has been dispersed. The agricultural work in his farm will not be concentrated in a short period of time. Thus, Qian can work every day, but will not get exhausted immediately. Moreover, the scale of each crop is no more than 100 mu of land, so the family laborers can be utilized fully and the hired wage laborers can be minimized. In virtue of this crop rotation system, Qian only needs to hire workers for about 40 gongs labor days to run his farm. With the same farm scale, this number of labor days is about half of that of P township locals and is less by about 10-20 labor days than that of non-local tenant farmers.

Another benefit of this crop rotation system is to get rid of the disadvantage brought by the single crop variety planting on the same land every year. "If you grow wheat on the same land every year, then when you spray farm chemicals, especially for weeds, you can find that the drug resistance of the weed is very strong. Besides, the fungus of the wheat gibberellic disease will accumulate year after year." Thus, the crop rotation system can not only maintain the soil fertility, but also can reduce weeds and diseases in the crop, which further can decrease the use and cost of fertilizers and other farm chemicals (see Table 6.1).

On the non-local tenant farmers' farm, the fertilizer cost of wheat and rice averages 170 yuan per mu and 200 yuan per mu respectively; the cost of farm chemicals for wheat and rice averages 60 yuan per mu and 200 yuan per mu respectively. On Qian's farm, the fertilizer cost of wheat and rice is controlled at about 108 yuan per mu and 120 yuan per mu, while the farm chemicals cost is about 45 yuan per mu and 140 yuan per mu. Along with the cost of seeds, Qian can save about 102 yuan and 130 yuan per mu on the wheat and rice respectively, when compared to the non-local tenant farmer. The cost saving, however, did not bring a reduction in

income. The yield of wheat in non-local tenant farms is averages 550-600 jin per mu, while in Qian's farm it is about 700 jin per mu; the average yield of rice in the former is 1,100 jin per mu, while in the latter it is 1,050 jin per mu. According to the price in 2014, the output value of wheat and rice in non-local tenant farms is, on average, 632.5 yuan and 1,540 yuan per mu, while it is 770 yuan and 1,470 yuan per mu on Qian's farm.

		Non-local tenant farmer	Qian
	plowing	35	35
	seeds	80	55
	fertilizers	170	108
Wheat	farm chemicals	60	45
	harvesting	50	60
	yield	550-600	700
	output value	632.5	770
Medium rice	plowing	75	40
	seeds	45	55
	fertilizers	200	120
	farm chemicals	200	140
	harvesting	70	70
	yield	1100	1050
	output value	1540	1470
labor cost per mu		32.5	25

Table 6.1 The comparison of main agricultural production costs and outputs between Qian and non-local tenant farmers, 2015 (yuan/mu, jin/mu)

It can be calculated from Table 6.1, that the annual investment in the non-local tenant farmers' farm is about 1,017.5 yuan per mu and the output is about 2,172.5 yuan per mu; while the production cost in Qian's farm is about 753 yuan per mu and the output is about 2,240 yuan per mu. After deducting 620 yuan per mu and 540 yuan per mu of land rent respectively, the net income is 535 yuan per mu on the non-local tenant farmers' farm, and 947 yuan per mu on Qian's farm. At the farm scale of 200 mu, the non-local tenant farmers can earn about 107,000 yuan per year, and Qian can earn an annual income of 189,400 yuan.

On the one hand, the diversification of grain crops adopts the "rice/wheat" planting structure of non-local tenant farmers, which makes full use of family laborers and ensures the stability of the farm throughout the year. On the other hand, it also adopts the "double cropping rice" planting structure of the local farmers, which can increase farm income. Obviously, Qian makes a good combination of these two planting structures, which not only increases income, but also reduces expenditure. Qian proudly told me, "I cultivate 200 mu of land, which at least can earn a net income more than 100,000 yuan every year."

In 2015, with the persuasion of Qian, his first son decided to stay at home and give help to the family farm. When I asked Qian about the future plan, he replied that:

"I don't plan to expand the farm scale. My first son comes back, so I plan to upgrade industry, e.g., I have decided to plant cash crops to increase output value. Although there is high risk, planting cash crops can bring high profit … I will explore slowly and try it on a small-scale. If the experiment is ok, then I will do it … I will not promote it blindly on large-scale."

No doubt, Qian has accumulated some capital through stable management of his from 2012-2015. Along with the return of his son, Qian has intended to plant cash crops and speed up capital accumulation.

Cash Crops

For Qian, Li Wenxiu's farm maybe a model. Li Wenxiu comes from Huainan, Anhui province. He cultivates 170 mu of land in A village, in which 120 mu has been transferred from the formal land circulation market, and 50 mu transferred from the local peasant households spontaneously. Unlike other farms in P township, Li plants not only grain crops, but also cash crops. Although relatively small in farm scale, the input and output value of his farm is undoubtedly in the forefront in P township. Li divides his farm into four parts, including 100 mu rice/wheat, 30 mu vegetables, 12 mu watermelon, and 20 mu chrysanthemums. Next, I will introduce the costs and benefits of these four parts respectively.

Table 6.2 shows the costs and benefits of rice/wheat in Li's farm. The net income of the grain crops is about 535.25 yuan per mu, which is not low and mainly because of the use of his own agricultural machines. Through a rough estimation, Li can gain an annual income of 53,525 yuan from grain crops. Li believes that it is much easier planting grain crops than vegetables. So, he basically hands over this 100 mu grain crops to agricultural workers.

Table 6.2 The costs and benefits of rice and wheat in Li's farm, 2015
(yuan/mu, jin/mu)

	Rice	Wheat
Plowing*	15	15
Seeds	44	81.25
Farm chemicals	190	100
Fertilizers	150.5	150
Harvesting	70	70
Labor cost	64.5	34.5
Yield	1000	600
Output value	1400	660
Land rent	540	
Net income	535.25	

*One large tractor is worth 50,000 yuan and generally can be used for 10 years, so the annual cost is about 5,000 yuan. As Li operates 170 mu of land, then the average cost is 30 yuan per mu.

Li puts more of his own energy into the management of cash crops. The watermelon can be produced three times in one year, so its production cost is considerable. It can be roughly estimated as follows: the total production costs of three times is 3,690 yuan per mu per year; the depreciation expenses of fixed

facilities are 2,750 yuan per mu per year¹⁵; the farmland plastic film is 100 yuan per mu per year; the land rent is 540 yuan per mu per year. So, the total production cost of watermelon is 7,095 yuan per mu per year. The watermelon can be harvested three times: the first time is on 25th May and the yield is 7,000 jin per mu; the second time is on 7th August and the yield is 2,000 jin per mu; the last time is on 5th November and the yield is 3,500 jin per mu; so the annual yield of watermelon is 125,000 jin per mu. The price of watermelon fluctuates in a whole year, the maximum can be up to 1.6 yuan per jin, while the minimum can be as low to 0.5 yuan per jin. Taking 1 yuan per jin as the average price, the annual income of watermelon is 5,405 yuan per mu. So, Li can gain 64,860 yuan from the 12 mu of watermelons he grows every year.

The specific costs and benefits of vegetables are illustrated in Table 6.3. There are two points should be noted. One is that the land for vegetables growing should be leveled by agricultural workers with a hoe. In order to save labor cost, this work usually is done by female workers. The other one is the fluctuation of vegetable prices. The price of edamame is only 4.25 yuan per jin, while it increased to 6 yuan per jin in 2014. The price of peppers is 1 yuan per jin in 2013, but decreased to 0.8 yuan per jin in 2014. From my fieldwork calculations, Li can earn a net income of 4,620 yuan per mu per year from vegetables growing. So, the annual income of 30 mu of vegetables is about 138,600 yuan.

Li did not plant chrysanthemums until 2010. He found a technician as a partner. Li supplied money, and the technician provided technology. In order to increase the latter's enthusiasm, Li promised to bear the whole of any loss by himself, but would share the profits with the technician. After one-year of collaboration, Li

¹⁵The total cost of a greenhouse is 8,000 yuan per mu, including 6,000 yuan for the steel frame and 2,000 yuan for the plastic film. The lifespan of the steel frame usually is eight years, so the depletion expense is 750 yuan per year per mu. In order to ensure the light, the plastic film should be changed every year. So the depletion expenses of fixed facilities are 2,750 yuan per mu per year.

successfully grasped the growing technique of chrysanthemums. The cost and benefits of growing chrysanthemums is as follows: plowing fee 15 yuan per mu, seedlings 480 yuan per mu, farm chemicals 200 yuan per mu, fertilizers 700 yuan per mu, and labor cost 1055 yuan per mu. In addition, also needed is 100 yuan per mu drying cost and 540 yuan per mu of land rent. So, the total cost of chrysanthemum growing is 3,090 yuan per mu. After processing into dried flowers, the yield of chrysanthemum is only 150-180 jin per mu. The price of chrysanthemum is between 38-45 yuan per jin, so the total output value is 6,847.5 yuan per mu. Subtracting the costs, the net income of chrysanthemums is 3,757.5 yuan per mu, so the 20 mu chrysanthemum enterprise can bring an annual income of 75,150 yuan for Li.

Table 6.3 The costs and benefits of vegetables grown on Li's farm, 2015
(yuan/mu, jin/mu)

	Edamame	Peppers
Plowing	15	15
Land leveled fee	60	60
seeds	150	90
Farm chemicals	0	150
fertilizers	100	500
Labor cost *	500	600
The depreciation		
expenses of fixed facilities	1,750	1,750
**		
Farmland plastic film	100	100
Yield	1,000	6,500
Unit price (yuan/jin)	5.25	0.9
Output value	5,250	5,850
Land rent	540	
Net income	4620	

*: including daily agricultural work and harvesting costs.

**: the depreciation expense of steel frame is 750 yuan per year, the plastic film is changed every two years, so the total depletion expense is 1,750 yuan per mu per year.

Add up the four sources of income, the total income of Li's farm is up to 332,135

yuan per year, which is obviously higher than that of the same scale grain crops farming. With regards to the low risk and low profit of grain crops, the cash crops are high risk and high profit. Besides, this high profit is also based on a large investment. From 2013 to 2014, the production cost Li has invested into his farm is as high as 440,000 yuan; the construction of 30 mu greenhouses cost 240,000 yuan; the agricultural machines cost 100,000 yuan. Since investing so much, Li expects to have a long land circulation time and much more land. He said: "In fact, we are willing to contract 10 years, even 20 years. But the local villagers refuse to do so, they are afraid the land rent can't increase if the contract time is too long. Now I want to expand my farm scale. Another 100 mu of land would be fine."

Before Li came to P township, he had already mastered the planting expertise of watermelons and vegetables. Later, he learned the planting expertise of chrysanthemums. This case shows that changing from grain crops to cash crops planting not only needs sufficient initial capital, but more importantly, the knowledge of planting expertise of cash crops. However, these two factors don't seem to hinder capital's desire for the maximization of profits. When I revisited P township in 2016, I found that 84.4% of the transferred land (3,279.84 mu) in J village was not growing grain crops, but 1,054.89 mu of lotus, 511 mu of vegetables and grapes, 70 mu of chrysanthemums, 1,053.15 mu for breeding lobsters and 79.5 mu for breeding crabs. Only 511.3 mu was for planting grain crops. This phenomenon will become more serious with capital chasing maximum profit.

Green and Organic Products

Growing cash crops, Wu Shaoxian and Sha Yunkai were not so lucky as Li Wenxiu. Wu and Sha had collaborated with other partners to grow green onion in Jiangsu province in 2008. Due to price drop, they lost about 3 million yuan between 2009 and 2010. In 2011, Wu and Sha came to P township to transfer land.

When they came to P township, it was the time of the failing first round of capital entering into agricultural production. So, P township government expected Wu and Sha to transfer the fertile land on the east side of river S. However, they refused. Rather, they took a fancy to the land in H village, which had not carried out the land consolidation. As for the reason, Sha explained that:

"Why we choose the land in H village?We just took a fancy to the two reservoirs here. No fish, no impurities, and the environment was good. Our drinking water comes directly from the reservoirs. We just consider that we will plant green food in this place. Different from other people, we have a long-term plan. If our farm is located at other places, our green food will be contaminated by the farm chemicals and water from other farms. But in this place, the water flow from the top down and without any pollution. So, that's why we contracted the land here".

H village is located in the hilly area of the west part of P township, surrounded by mountains on three sides. Its greatest feature is the independent water supply from the two reservoirs. It is precisely because of this favorable environment that Wu, Sha and other four partners together transferred 1,455 mu of land in H village in 2012. After one year, these six partners operated separately. Wu and Sha chose a relatively remote and independent plot of land, with a scale of 588 mu.

Both Wu and Sha don't have a rich agricultural production experience, so they also adopt the planting structure of the non-local tenant farms in order to keep a foothold in the agricultural production sector. However, Wu clearly recognizes that "the current planting structure is not profitable, because in five years, one year's harvest is certainly not good, which will offset at least two years' earnings. So, we can only earn money in 2 or 3 years in our contracted 5 years." With this consideration, they made a little change in the planting structure. They no longer plant the single species of rice, rather they plant different varieties of rice and begin to grow organic rice and specialty rice. For instance, they grew 300 mu ordinary medium rice, 70 mu hybrid rice, 150 mu glutinous rice, 30 mu red rice, 18 mu black glutinous rice, and 20 mu of organic rice in 2015.

The production costs of red rice and black glutinous rice have no significant differences from the ordinary medium rice, but the yields are much lower than the latter one, only about 600 jin per mu. The organic rice cultivation is relied on a "production package", including organic fertilizers, soil decontamination agents and bio-pesticides, which is worth 620 yuan each pack and is purchased from a biotechnology company in Beijing. The yield of the organic rice usually is 900 jin per mu. The organic rice and specialty rice are not sold directly to grain traders, but processed into the milled rice and sold through their own Taobao online shop. The sale prices of organic rice and specialty rice are respectively 20 yuan and 10 yuan per jin, which is much higher than that of ordinary rice. Therefore, although the yields are lower than the ordinary rice, the prices of organic rice and specialty rice are such that it offsets the disadvantage on the yield and brings a high profit. Currently, the organic rice from their farm has already been granted an organic certification by Anhui province. Besides, because of the cultivation of organic rice and specialty rice, their family farm has also participated in the municipal agricultural show in 2014 as the only representative of rice-growing family farm in P township.

In order to expand the scale of organic planting, Wu told me they are preparing to grow organic vegetables. They have chosen a hilly basin in H village as the vegetable base. Due to lack of the vegetable planting expertise, Wu is ready to find a vegetable technician to cooperate with, "I supply the money, he provides the techniques. If I earn money, I share the profit with him; if not, I afford the whole loss" (Wu Shaoxian). For the future development, Wu and Sha have a clear plan, that is, "to develop organic planting and expand our own brand." They plan to open some stores in Wuhu and Nanjing to sell their organic products, including organic vegetables, rice, some local specialties of P township and so on. Currently, they are preparing to establish a cooperative combining planting, breeding, and eco-tourism.

Labor Supervision

However, most of the scale farmers in P township still cultivate rice and wheat. So, what they are more concerned about is how to strengthen the supervision to workers, improve labor quality, and avoid the issues of "show up for work but contribute non-labor" (*Chugong bu chuli*) and "focus on quantity over quality" (*Zhongliang bu zhongzhi*). From my fieldwork, I identify three labor supervision strategies: the first one is the regionalized management/labor, quality inspection and motivation, which I call "Hard Supervision". The second one is the "Participatory Supervision", that is, the scale farmers monitor the workers through personally involving them in management and labor. The third is to promote workers' self-supervision through the social norms in an acquaintance community, which I term as "Soft Supervision". According to the actual situation, these three strategies will be integrated to achieve labor supervision.

Hard Supervision: Regionalized Management and Labor, Quality Inspection and Motivation

There is a difficult issue in agricultural production, that is, it is very hard to monitor and control the entire labor process effectively and to measure the work quality and its effectiveness constantly. It is a particularly serious problem for the largescale farms. To avoid these issues, some scale farmers expect to develop a management system to supervise the labor quality and performance of workers. The common ways in P township are the regionalized management and labor, quality inspection and motivation. To be specific, the regionalized management and labor refers to the scale farmers dividing the land into some parts and assign each part to different workers' captain and work group. When the laborers complete their works, the scale farmers inspect the labor quality on each part of the land. As for the workers with good performance, some material rewards (mainly bonus and presents) will be offered. The "hard supervision" is mainly adopted by capitalist farmers who operate the large-scale farms.

Capitalist farmer Yang Chunfeng is a typical case. Yang divided his farm into three parts. Each part is operated by a workers' team led by a workers' captain. Yang himself takes charge of the management affairs of the whole farm, such as the purchasing of the agricultural materials and the deployment of the agricultural machines among the three teams. The purpose of the regionalized management and labor is to create a competing situation among the three workers' captains and to make it easy to compare the quality of their management and labor. This management approach is explored from the experiences of the non-local tenant farmers and Yang's own practices. Its core concept can be summarized in Yang's one sentence - "the workers' captains are my executive organs, while I am the decision-making organ." In Yang's opinion, the most important thing in farm management is how to manage the workers' captains well. If the workers' captains manage well, then the agricultural workers will work well. In addition, Yang sets up a set of material incentives. For the workers who perform well, Yang usually gives a bonus of 2,000-3,000 yuan at the end of the year. The purpose of giving this bonus is to motivate the employees to work hard and increase output. As for the good or poor performance, Yang believes that there are no objective criteria, but a relative standard. He said: "As long as he (the employee) does his best and works hard. That's all. I see all their performances in my eyes … The work I let him do, he must do and complete."

If the "hard supervision" in Yang's farm just stays at the management level, then in Xu Jianguo's farm, it has directly reached to the level of the workers'. Now, Xu directly operates 250 mu of land with hired laborers in K village. Xu hires one year-laborer and three fixed casual laborers. In order to effectively check the quality and effectiveness of their labor, Xu implements a very detailed regionalized labor and quality inspection system. He arranges the main farm work on each plot of land, including seeding, spreading and spraying, directly to one agricultural worker, which obviously is easy to check the labor quality of each worker on each farm work. Xu explained:

"You (agricultural workers) take charge of this plot of land, he is responsible for that plot of land. When sowing seeds, if you missed one place, then I can find out immediately"; "When weeding, you are specifically responsible for one plot of land … If the weeds on this plot are extirpated, but that plot not, then I know he didn't work well. Besides, if the wheat or rice in that plot of land is yellow after spraying fertilizers, then it is mainly because of the labor quality."

Through this system, the scale farmers can also learn the different advantages and disadvantages of employing different agricultural workers. So, the farm tasks will be arranged according to the corresponding agricultural workers who are good at them. It can not only ensure the work speed but also the work quality. As one capitalist farmer said, "As a manager … I should have a good understanding of each worker. Someone works well but slow; someone works not good but fast. So I should arrange suitable jobs for those two types of workers" (Wu Shaoxian). To match up this system, the workers on Xu's farm still use the small sprayer for farm chemicals, rather the large sprayer. Xu believes that the major problem with the

large sprayer is to mix the labor of different workers which makes it impossible to distinguish the individual worker's work and its quality. "If all the workers work together, then their labor cannot be distinguished clearly. So the effect is relatively better by using the small sprayer" (Xu Jianguo).

Besides, Xu also provides some material rewards to workers with good performance. "Whether or not they can obtain the bonus depends on the work effectiveness, the usual performance and workability" (Xu Jianguo). Similar with Yang, Xu who also adopts a relative standard of the work performance. He takes his workers' captain to illustrate this standard.

"My workers' captain is an honest man, who always works in the field. His basic annual salary is 20 thousand yuan, I usually give him 7-8 thousand yuan bonus, because he works hard and is responsible ... Sometimes I come to have a visit. The time is uncertain, sometimes 10 a.m., sometimes 9 a.m., even 7 a.m. ... But every time I come, he always works in the field, which shows that he doesn't do superficial work."

In conclusion, the regionalized management and labor, and quality inspection are actually an individual / team contract system, which intends to link the labor process to the labor outcome. By doing this, the labor quality and effectiveness is easy to supervise and check. In this regard, it is, in fact, a variant of the "piece-wage" system. "Since the quality and intensity of the work are here controlled by the very form of the wage, superintendence of labor becomes to a great extent superfluous" (Marx, 1990: 695). Now, the agricultural workers pay more attention to the self-supervision. In addition, this system also enables the scale farmers to accurately grasp the labor time required to complete certain farm tasks, and thus also be able to supervise each worker's labor attitude. The material motivation can promote the mutual competition among workers and increase labor intensity or prolong working hours. It seems to bring the employees some interests, but

actually it brings scale farmers much more.

Participatory Supervision: Involvement of Scale Farmers in Management and Labor Personally

Different from the CFs, the PCFs mainly employ "participatory supervision" to realize labor supervision. It is mainly because, on the one hand, the PCFs run a relatively small-scale farm, and on the other hand, there is usually one family member directly involved in the agricultural production in PCFs' farms.

In P township's agricultural production, three tasks, seeding, spreading and spraying, have the maximum labor demands, and all employ the daily wage system. The most common issue under the "time-wages" system is the phenomenon of "show up for the work, but contribute non-labor". However, this issue can be largely avoided if the scale farmers take part in the agricultural production personally. Here, the scale farmers actually play a role of "supervisor". As one PCF stated: "I also work as a worker. If I work together in the field, the workers certainly work hard; If I am not, they work carelessly, which is certain" (Wu Hanyun).

Take spraying farm chemicals as an example, the most common way of spraying in P township is one large sprayer with three workers. These three workers have a clear division of labor. One is responsible for the supply of farm chemicals. The other one is to manipulate the spray gun and spray farm chemicals in the field, who is followed by another one dragging the pipe. The speed and quality of the spraying largely depends on the people who manipulate the spray gun, because he needs to adjust the pace according to the specific situation of the crops. That is also why some scale farmers would like to manipulate the spray gun by themselves. But most of the scale farmers only take charge of the supply of farm chemicals and deploy the spray gun to a more reliable worker. In fact, for those scale farmers who already have some experience in farming, they clearly know how much land can be covered by the farm chemicals. Therefore, even standing on the field edge, they also command the workers to change their speeds from time to time.

Besides, some scale farmers actually can make a good judgment of each worker's labor skills and attitude if they are often involved in the agricultural production personally. I once asked my interviewees how they distinguished the bad workers from the good ones? No one gave me a direct answer. The answers I got are as follows. "It certainly can tell" (Xu Liqun); "Only just need a glance, everyone can see " (Liu Bao); "It can easily tell … if that worker does not contribute labor, you can notice from his walking. Other people walk as running, but he walks slowly" (Chen Heping). Even without the direct answer, I think that the reason why they can make a right judgment is largely relying on their accumulated experience from working in agricultural production.

Soft Supervision: Promote Workers' Self-Supervision Through Social Norms

Although capitalists are usually skeptical about the human nature of "peasantness", it does not prevent their employment of the social norms in a rural community to achieve the purpose of capital accumulation. As discussed in Chapter 2, commodity relations have penetrated into all aspects of the rural community. Even so, some social norms that existed in "acquaintance society" (Fei, 1998) and "moral community" (Scott, 1976) still play a role in China's rural areas today. Huang Yu, an anthropologist, has also considered that "the community is an over-determined site where social reciprocity and monetary exchange work together" (Huang, 2012:137). In a rural community, one's conduct or acts are still affected by some social norms. If going against these social norms, then the violator will inevitably be caught in the pressure of public opinion. The social norms that still

play a role mainly include "favor" (*Ren qing*), "face" (*Mian zi*), and "being a good human" (*Zuo ren*). The "favor" is established by the way mutuality between two sides and is deepened through the mutual assistance and cooperation. "Pay back the favor" (*Huan renqing*) in a timely manner is an important manifestation of "being a good human". While one important aspect of "being a good human" is to have a "face" in a rural community. In P township, the scale farmers obviously know this well. So, they usually utilize these social norms to establish the "soft supervision" system.

The internal mechanism of the "soft supervision" is to establish and maintain a friendly interpersonal relationship between the employees and employers outside of agricultural production. Through giving some benefits and presents (such as wine, tea, cigarettes, etc.) to agricultural workers, the scale farmers make these workers owe them a "favor" or their loyalty. Then, with the influence of "being a good human", the indebted "favor" forces the agricultural workers to "pay back the favor". What the agricultural workers can pay back is to work diligently on the employers' farms, rather than "show up for the work but contribute non-labor", "focus on quantity over quality" or be lazy. Otherwise, they are not obeying the social norms and are violating their principle of "being a good human". One agricultural worker's point of view shows how the "soft supervision" based on the "favor" functions effectively.

Li Mingcai is aged 68 years old and now works on a non-local tenant farm (Mr. Mu) as the worker's captain. A basic judgment of Li of Mr. Mu is that "as for being a good human, boss Mu behaves well. Now it is not easy to meet such a person". To be specific, the good behaviors of Mr. Mu are mainly manifested in the following two ways:

The first one is to treat workers well. Li gave me some examples to prove how Mr. Mu treated to him and other workers politely. "When we are working, he (Mr. Mu) just puts the cigarettes beside the electro mobile. For a moment, he will give us one cigarette. When we get off work, he usually says, 'thanks for your hard work.' Human's feelings are similar. You are good to me and I will good to you too. Boss Mu is a good person. I work for him, I'm highly motivated. As the saying goes, 'if the children have filial piety, their parents feel happy' ... we are happy to work for him'; "As for the two fixed casual laborers, boss Mu usually gives them one thousand yuan as a bonus at the end of the year. It's not about the amount of money, (but about the kindly feeling), which makes these two laborers very happy."

The second one is not being oversensitive to the labor time.

"For example, the labor time for us is eight hours per day, (which is one workday). But if we work only six hours today, boss Mu also counts it as one workday … we all know fairly well … you can come to work at 8 or 9 am. or a little later, if you have a guest at home or something else. We do not care too much about this, not like in the company you should go to work punctually … you don't work eight hours today, he still gives you 100 yuan. So, everyone knows well in their own minds."

For the first aspect, although Mr. Mu is a "stranger" in P township, he complies with the principle of "being a good human" very well locally, which makes Mr. Mu gain the good feelings from agricultural workers. For the second way, although agricultural workers might work less than eight hours one day due to various reasons, Mr. Mu still records it as one workday and gives workers 100 yuan wages. With regards to the interaction between people, the agricultural workers owe a "favor" to Mr. Mu. So, they should pay back the "favor". What they can do is to work conscientiously and not to be lazy. Li Mingcai stated that: "If the scheduled time of beginning to work is 7 a.m., these two fixed casual laborers sometimes arrive at 6:30 a.m., even earlier than me … Sometimes, when it comes to 5 p.m., I tell them to get off work, but they still work a little"; "For example, when it comes to 5:30 p.m., but we have not finished the spraying. Boss Mu tells the workers to get off work, but the workers say: 'Only 10 mu of land remaining, let's complete it today. Otherwise, you (Mr. Mu) still require hiring workers.' Then, they work until the sun goes down … They work for him even to this extent – the boss asks the workers to get off work, but the workers to get off work until the sun goes down … They work for him even to this extent – the boss asks the workers to get off work, but the workers still do not want"; "The wages of casual laborers usually are paid when they finish the work. But when boss Mu prepares to pay them wages, these casual laborers say: 'Don't rush, you can give me at the end of the year.' The agricultural workers around here all know the good of boss Mu, if they once work for him."

From Mr. Mu's other two agricultural workers, I got the same recognition. One said: "Mu is a good person, so I work for him; if not, I have already not worked for him … Now the good boss like Mu is less. There is a good boss in F county, who usually gives some tea or two bottles of wine as gifts to his workers. Mu also gives me a bonus near the Spring Festival, 600 yuan in the year before last, and 700 yuan last year, who is much better than the boss in F county." Another one stated: "Boss Mu gave me 700-yuan bonus last year. He treats us properly. If he continues to transfer land in the next year, I will continue to work for him."

Different from Mr. Mu, Mr. Li, also a non-local tenant farmer, has fallen into trouble in hiring agricultural workers in P township due to his failure to comply with the local social norms.

"There is a boss from Chaohu, boss Li, who transferred land from Xu Linbao. Once he called me and asked me to hire some laborers for him. Then I gave calls to two laborers, who worked for him last year … 'Do you want to have work in Li's farm?' I asked them. One replied: 'No. Last year we two guys worked for him. At the end of the year, we got nothing, even one cigarette.' In summer, the weather is uncertain, maybe it rains tomorrow, so the fertilizers should be spread as soon as possible today. The workers worked a long time, so normally you (boss Li) should give the workers 150 yuan per day. But boss Li didn't treat people like boss Mu, he strictly followed a regulation, namely, one workday is 10 points, which equals to 100 yuan … Zhu Xiaoyong (one agricultural worker) stated: 'When working for boss Mu, I basically can gain 10 points one day, that is, one workday; while working for boss Li, I can only gain 7 points one day, that is, 70 yuan one day. Even we work only several hours in the afternoon, boss Mu still gives us 100 yuan. However, boss Li counts the time strictly, and you only can get 70 yuan one day at most.' That's the reason why boss Li finds it hard to hire workers. You should not treat the workers like this." (Li Mingcai)

Of course, the local scale farmers can adopt the "soft supervision" strategy relatively more easily than the non-local scale farmers, because they themselves are embedded in the network of the acquaintance community. Based on the social norms of "acquaintance society", these local scale farmers do not worry about agricultural laborer's' work quality. As one local scale farmer said: "The work quality is good, because we are neighbors, villagers in the same group. It is useless for them to try to fool you" (Gui Jin).

"Unlike the ruthless and indifference in the 'stranger society', the acquaintance society is full of favor and face ... 'Face' is obtained from the positive evaluation of the public opinion of individual behavior. A peasant assiduously striving after 'face' can, therefore, obtain the social resources he fights for" (Wu, 2011:19). In this sense, I argue that for a peasant who has done farming nearly a whole life, the good or poor of the farming expertise is directly related to his "face". The mastery

of farming could directly be seen from the situation of the crops in the fields. In P township, every time I interviewed the medium farmers and small-scale farmers, they all emphasized that their farming expertise is better than that of scale farmers – "The fields of big households are full of weeds, while there are basically no weeds in small households' fields." Verdery (2003:178-181) called this the "visible economy": "In this system of values, having a field and well-weeded crops that all could see was a way of exhibiting mastery and asserting superior status over those … with poor labor capacity"(179).

However, the paradox is that the 'face' complex valued by peasants has been manipulated by the scale farmers as a tool to establish self-supervision and promote the labor enthusiasm of the agricultural workers. For example, the capitalist farmer, Wu Shaoxian, has established a self-supervision mechanism for his agricultural workers.

"Peasants are honest, and value face. Every once in a while, I give each of them (workers' captains) one table, which includes the statistics of wage and workdays. If a workers' captain performed poorly he would feel embarrassed himself. He fell behind at this stage, but maybe tried his best at the next stage" (Wu Shaoxian, cited from, Feng, 2015a:51).

The agricultural workers themselves will also bring the "face" into employment relations. The discourse of three workers' captains' demonstrate this point. "If the boss is well, you are well too. If the boss is broken, you worked for him and you also lose your reputation. It is actually for the face as a human. You do well, then you gain face" (Liu Bao); "(If someone does not do well,) it is certain for me to admonish him. If I don't do it, I neglect my duty. You mess up the boss, then you also mess up" (Xu Liqun); "You work for the boss, you should work much harder than for yourself. You increase output, the boss will be happy, and yourself too. If you can't, even make the crop wasted, you will be embarrassed" (Chen Heping).

It is based on the consideration of the face that the agricultural workers in P township always give full play to their farming expertise and complete the farm work diligently.

From his fieldwork in Sedaka, Scott (1985: 235) argued that "the sanction of local opinion and custom continues to exert a small but perceptible influence on conduct" (235). It is this local opinion and custom, or "villageview", that brings a material force and a social pressure to the village rich. While by virtue of this local opinion and custom, the village poor wage a "war of words" on the village rich. Here, the local opinion and custom of the village are the tools used by the village poor against the rich. I do not deny the validity of this observation, which I will expand upon further in the next chapter. But as the coin has two sides, Scott ignores the other side of the local opinion and custom of the village, that is, they can also be used to manipulate the workers by the capitalists (or the village rich). As described in this section, through the social norms, mainly including "being a good human", "favor" and "face", scale farmers have succeeded in promoting agricultural workers to voluntarily establish an internal self-supervision. Compared to the external "hard supervision" system, this internal "soft supervision" can not only save the supervision cost, but also has a more noticeable effect. In addition, once the social norms have been "internalized" into the employment relationship, the original ice cold capital accumulation relationship has taken on a sentimental veil. It can be said that with this internal self-supervision, the external "hard supervision" is even unnecessary.

Mechanization, Chemicalization and the Adoption of New Agricultural Techniques

Besides the above two strategies, the scale farmers also invest in improving the

farm mechanization and chemicalization of agricultural production, and adopt some new agricultural techniques. This approach is actually similar to the trend in the industrial sector, namely, with the development of capitalism, the proportion of the constant capital will increase, while the proportion of the variable capital will decrease. This approach brings two effects: one is to enable capital to control the agricultural production much more easily, thus remove the obstacles in the road of capital accumulation; the other one is to absolutely reduce the laborers required on the farm, and meanwhile to increase the labor intensity of existing agricultural workers', which also facilitates capital accumulation.

a. The Improvement of Mechanization

As mentioned above, the income from double cropping rice is higher than the "rice/wheat" planting structure, but there is an immense demand for labor between the two rice crops. The adoption of the transplanting machine can help to solve this problem. As the Director of Agriculture Office in P township said: "If we can use the transplanting machine, many big households can transform from the 'rice/wheat' planting structure to double cropping rice in the near future, since the income of the latter is higher than that of the former."

In fact, there are some scale farmers using the transplanting machine. One of them is Chen Fuwei. As early as 2010, Chen had already spent about 20 thousand yuan to purchase four transplanting machines, and planned to realize the mechanization of planting on his farm. But this intention failed, mainly because of the uneven fields and lack of seedling raising techniques. The consequence was he subcontracted the land to non-local tenant farmers. In 2013, Chen took back 100 mu of land and again engaged in agricultural production. This time, he adopted the "rice/wheat" planting structure, but made a small change. He changed the japonica rice into hybrid rice, and replaced the way of direct seeding with the transplanting.

The gross earnings from the hybrid rice and japonica rice are similar, both about 1,600-1,700 yuan per mu, however, the labor cost of the former is lower than that of the latter due to the adoption of the transplanting machine. So, the net income of hybrid rice is much higher.

Besides, due to the relatively short growing period of the hybrid rice, the wheat can be sown earlier, which is a benefit to increase the yield of wheat. Chen stated that: "The income of the rice is similar, both about 1,600-1,700 yuan per mu, but my wheat can produce over 200 jin per mu, more than other farms." Therefore, after planting hybrid rice, the earning per mu in Chen's farm is obviously higher than that of non-local tenant farmers. When I interviewed him in 2015, the production model Chen Fuwei adopted has largely succeeded, but the only problem is a lack of a formal seedling raising greenhouse. Because today's seedling raising techniques cannot keep up, Chen Fuwei can only transplant 35 mu of land per day with his transplanting machine. He believes that when this issue is solved, the transplanting machine can transplant 100 mu of land per day at least.

For the majority of the scale farmers in P township, they all expect to realize the benefits of mechanization on the sowing link, which can not only save production costs by reducing the use of herbicides and labor, but also can increase the capitalist's control over the labor process and solve the issue of labor supervision. As Liu Guanshan, one capitalist farmer, said: "I can only control the general direction to the workers', but cannot control all the details. So, it is best to use the transplanting machine. By using the machine, the weeds will be fewer and the demands for labor will be reduced."

In addition, the spraying of farm chemicals and spreading of fertilizers are both increasingly inclined to mechanization. When coming back to P township in 2016, I found one capitalist farmer had adopted a new large agricultural machine, which can not only be used to spray farm chemicals, but also to spread fertilizers. This

agricultural machine is worth 34,000 yuan, which is cheaper than a large tractor and can be afforded by most of the scale farmers in P township. This machine has a higher work efficiency than the previous way of spraying or spreading. For example, for the spraying, one driver can cover about 100 mu rice with this new machine, while with the commonly used big sprayer, it needed three agricultural workers to complete this same workload. Not to mention the spreading of fertilizers. Obviously, this new machine can greatly reduce the labor demand on the farm. This capitalist farmer stated that he completed the seeding and the first time spreading of 700 mu of land in just 6 days with 6 workers. According to my fieldwork in P township, this working speed definitely is the fastest in P township, and with the least amount of labor. If the 6 workers still worked in the previous way – manual seeding and spreading, then they would spend 15 days to complete the same work. Obviously, the adoption of this machine has greatly reduced the labor demand on the farm. Actually, the seeding is the link that cannot keep up with the whole working cycle on this capitalist farm, which also greatly limits the productivity of the large tractor and the new machine. So, Mr. Liu expects the transplanting technique to be popularized in P township. When so, he believes that the 700 mu of his land can be managed smoothly by himself and his nephew, two family laborers. The demand for agricultural workers will be reduced to the minimum. Although this new labor-saving machine has not been adopted in other farms in P township, I believe that it will soon be employed by other farmers.

Along with the improvement in mechanization, the scale farmers can make a change to their planting structure, which can increase the output value of land. They can also greatly reduce the labor demand on the farm, which can not only save labor costs, but also free the farmers from labor supervision. What's more, the adoption of the agricultural machine also increases the labor intensity of the existing agricultural workers on the farm. The electric spreader is an example.

With the rise of the scale agriculture, the electric spreader was introduced in P

township around 2008, which was mainly because of its higher efficiency over manual spreading. With the electric spreader, one worker can spread manure about 20 mu on wheat or 10 mu on rice, while without the electric spreader, the worker can only spread 10 mu wheat or 5 mu rice. The higher efficiency of the electric spreader gained positive appreciation from the scale farmers in P township. "It (the electric spreader) has a higher efficiency, which can spread manure about 20 mu of land in one day. One worker especially spreads the fertilizer in the field, while another worker is responsible for pouring the fertilizer into the spreader. The faster the latter pours, the faster the former walks" (Sun Wenqiang).

The electric spreader is a plastic bucket flatted on the front and back sides, which can carry 40 jin of fertilizer. The application method is as follows. One worker hangs it on the chest, while another worker helps to pour the fertilizer into the bucket. After the fertilizer has been loaded, the worker opens the switch on the side, and the granular fertilizer will be spread out from the bottom of the bucket at a given speed. Then, the worker should move his body side to side just like a pendulum. The previous spreading method was different from this as, the worker carried a bucket in one hand, and then spread fertilizer with the other hand moving forward. It seems just a simple change in the way of spreading fertilizer, but this change greatly increases worker's labor intensity. In the old method, the worker can adjust his traveling pace and the fertilizing amount according to the situation of the crops. For example, if the crops in this place are not good, the worker can slow down his pace and increase the fertilizer; and vice versa. Besides, the worker can also adjust the spreading speed according to his own physical condition. In short, in the previous spreading way, the worker is the controller of the labor process, who dominates the application. However, this has changed when using the electric spreader. With the electric spreader, it is the machine that controls the worker. The worker's traveling pace and fertilizing amounts are both controlled by the machine. As an older farmer stated: "I do not use to the electric spreader. I prefer to spread with my hands, which is much freer."

One of the results brought about by this labor process controlled by a machine is an increase in workers' labor intensity. Since the speed and amount of fertilizing are given, the worker cannot make a change according to the specific situation in the field or himself. As a result, the worker should keep a certain traveling speed: if too fast, the fertilizers will be spread less in this place; if too slow, then the machine will spread too much. In addition, the worker cannot stop and have a rest halfway. Rather, the worker should travel from this side to the other side (or a round trip), and only can have a rest when it is time to re-load the fertilizer. Obviously, due to the machine's constant speed and the controlled amount of fertilizer, the workers have to run in the fields every moment, which improves their labor efficiency, but also increases their labor intensity. The increased labor intensity is all applied to workers' waists, because they have to move their body like a pendulum when spreading. Because of this reason, some agricultural workers openly refuse to use the electric spreader and prefer the previous fertilizer spreading method.

"My waist cannot stand it when using the electric spreader. When I just began to use it one morning, my waist is straight just like a shoulder pole at noontime. The speed is quick, but I cannot have a rest. Only arriving at the other side can you have a rest. Once you open the electric spreader, you cannot have a rest." (Wang Ping)

"Now we are not able to use the electric spreader, sometimes the fertilizer is spread too much, while sometimes too little ... some workers are not used to work with it, especially the older workers. The common outcome is that this plot of land ok with too much fertilizer, while that plot of land has too little. You should have a technique to use the electric spreader, the walking pace cannot be too fast or too slow. This is the problem of the mechanical spreading … But I can control it, if I adopt the manual spreading way." (Quan Cheng)

"I do not use the electric spreader usually. The fertilizers are spread by hand. The agricultural workers say they cannot hold the machine for a long time because there is no rest ... you have to twist your waist like a pendulum. The workers cannot be used like a machine." (Gui Jin)

Although a minority of scale farmers do not use the electric spreader, the majority of them prefer to adopt this machine. Because it can not only bring a higher labor efficiency, but also can increase labor intensity. The workers can complete more farm work in the same (or a shorter) period of time, which not only saves labor costs for the scale farmers, but also squeezes more surplus value for them.

The electric fertilizer spreader is not the only machine to make a difference. The big electric sprayer and other agricultural machines all play the same basis function: they increase the efficiency of labor. Even now a small number of the agricultural worker refuse to use some machines, their refusals ultimately cannot match the desires of scale farmers to accumulate capital. Eventually, the living labor will succumb to the dead labor.

b. The Adoption of Superior Agricultural Materials

The superior agricultural materials mainly include improved seeds, imported farm chemicals and fertilizers. The adoption of these superior agricultural materials seem to increase the production cost, but two benefits have been neglected. One is the reduction in the numbers of the laborers. Due to their high quality, the usage of these superior agricultural materials can greatly reduce the amount needed. For example, the average amount of compound fertilizer on wheat can be reduced from 90 jin to 50 jin per mu, while that of rice can be decreased from 120 jin to 70-80

jin per mu. It is same for the seeds and farm chemicals. In effect, the increased production cost in agricultural materials is offset by decreased labor cost. So, in fact, the total production cost will be unchanged by and large.

Since the total production cost is not reduced, why are scale farmers so keen to adopt superior agricultural materials? I think it mainly reflects a reduction in the trouble of labor supervision along with the reduction of labor demands. This is actually the other benefit brought by the adoption of high-quality agricultural materials.

For agricultural production, the seeds are the most important prerequisite. The quality of seeds not only determines the final harvest, but also directly relates to the issue of reseeding. If the seeds are needed to be replanted, this not only increases the production cost, but also has the risk of missing the farming season. So, in order to guarantee the sprouting rate of seeds and avoid the issue of reseeding, the scale farmers all prefer to use the high-quality seeds, even though it has a high price. It is the same with the use of fertilizers. For a combined consideration, the scale farmers are inclined to use the controlled-release compound fertilizer, which is expensive, but its effectiveness and persistence is high. Thereby, the frequency of spreading fertilizer is reduced and labor is saved.

The farm chemicals are also important to agricultural production. Thus, the scale farmers usually choose to use the expensive imported farm chemicals of the lasting effects of which are considered beneficial. For example, spraying the imported pesticide one time can guarantee lasting 15-20 days, while the domestic method can only ensure one week. Thereby, the frequency of spraying farm chemicals can be greatly decreased, and further can save labor costs. Compared to the pesticide, the herbicide has a more direct relation with the number of laborers required on the farm. An experienced agricultural worker once told me: "If you want to reduce the number of hired laborers, two requirements should be met: one is to avoid

reseeding, the other one is to avoid hiring labor to weed" (Li Mingcai). The weeds should be cleared before the crops grow up. Otherwise, when the crops have grown up, the farmer has to hire laborers to weed, rather than use the herbicide which will also damage the crops. Therefore, if one cannot solve the problem of weeds by using herbicide in the initial period, afterwards, the farmers will have to hire laborers to do the weeding, which not only increases the labor cost, but also brings the issue of labor supervision. As one petty-capitalist farmer pointed out:

"The weeds must be cleared at one time. If it cannot, then there is no way to clear them the second time, because just like a human, the weeds will become resistant to the herbicide. We all use the imported high-quality herbicide, produced by Bayer. If the weeds can be eradicated early, it is unnecessary to do it the next time … I use this imported herbicide, only need to spray 4 times, but other herbicides are required at least 5-6 times. So, I save the labor cost, which can just be offset by the increased cost of herbicide" (Wang Ping).

In short, the adoption of the superior agricultural materials can greatly reduce the numbers of laborers needed on the farm, which can not only decrease the trouble of labor supervision, but also lower the uncertainty during the agricultural production process and increase the prospect of capital accumulation.

c. The Adoption of the New Agricultural Techniques

An important reason why the transplanting machine cannot be promoted on a large-scale in P township is the constraints of the seedling raising technique. The local government has also noticed this issue and has already taken action to break through this bottleneck. In 2012, in the name of promoting transplanting techniques, the F County Agriculture Committee freely provided 8 transplanting machines and 50 thousand yuan in each of 5 years for testing expenses to the Red

Star company. However, it seems it still has a long way to go for the Red Star company to succeed. Noticing the huge benefits that can be brought from advanced seedling raising techniques, three capitalist farmers in P township established a cooperative and tried to develop the seedling raising technique. Under the support from P township government, they individually invested 200 thousand yuan to establish a greenhouse seedling raising factory. When I went back to P township in the spring of 2016, this seedling raising factory had been built. A professional expert from Nanjing was invited to provide the guidance. On April 14th, 2016, a public presentation of the transplanting technique was carried out in P township. The results show that the seedling raising technique and transplanting technology have basically succeeded. So, the remaining work is how to promote the techniques on a large-scale to the whole P township.

In addition to the seedling raising technique, the scale farmers also actively introduced and adopted a new weeding technique. Yang Chunfeng, a capitalist farmer, told me this story.

"A few years ago, I collaborated with the Nanjing Agricultural University in the field of weeding and the reduction of farm chemicals. The university offered me to test some techniques. I followed their ways to carry out the trials …One technique is especially used to eradicate the weeds. To be specific, first, pour the water into the fields before sowing the seeds. When the water has filled the fields, block the water inlet, so the weed seeds in the outside water will not be brought into the fields. With a little time, the weed seeds in the field will be floated upward, then the workers can get them out with a string bag. After these steps, I can clear the weeds in the field by spraying herbicide once. In this way I can largely clear the majority of the weeds, because most of the weed seeds have already been pulled out. One worker can pull out a lot of weed seeds. By doing this, I can save a lot of labor." Although the adoption of this method brings an increase of labor input in the initial stage, the labor input in the later daily management can be greatly reduced. Besides, there is no longer need to spray a lot of herbicides. Thereby, the total labor demands on the farm can be decreased and the production cost can also be saved greatly.

With either the adoption of new agricultural machines or the new agricultural techniques, the investment will be increased in the short term, but in the long term, the machines and techniques can save production costs and increase the farm profit. Besides, the new machines and techniques can also assist the scale farmers to strengthen their control over the process of production and labor. The largest benefits brought by this intensive "control" are to make labor supervision much easier and finally to facilitate capital accumulation.

Summarizing this section. How to obtain the maximum benefit from a limited land base in a short period of time is undoubtedly the question that the scale farmer most be concerned about. The three strategies are the efforts and attempts adopted by scale farmers to pursue the maximum accumulation of capital in the agricultural production sector. Relatively, the diversification of the product planting structure has the requirement of advanced technique and experience, which cannot be obtained by most of scale farmers in a short time. So, this strategy was only adopted by a small group of scale farmers in P township. In sum, labor supervision, the mechanization and chemicalization of agricultural production, and the adoption of new agricultural techniques are the most common and important capital accumulation strategies employed by most of the scale farmers in P township.

Accumulation from Circulation

Marx (1990) identified two types of relations between labor and capital, namely, "the formal subsumption of labor under capital" and "the real subsumption of labor under capital". The formers one is "the general form of every capitalist process of production" (ibid., 1019), "because it is only formally distinct from earlier modes of production on whose foundations it arises spontaneously (or is introduced), either when the producer is self-employing or when the immediate producers are forced to deliver surplus labor to others" (ibid., 1025). The latter one is "the specified mode of production – capitalist production – which transforms the nature of the labor process and its actual conditions" (ibid., 1035). In this sense, depriving the peasants of their means of production and making them proletarianized (namely, the real subsumption of labor under capital) is not the only way of realizing capital accumulation. Coincidentally, Chayanov (1986 [1930]: 257-258) also stated that "bringing agriculture into the general capitalist system need by no means involve the creation of very large, capitalistically organized production units based on hired labor ... these trading links that convert the natural, isolated family farm into one of a small commodity producers are always the first means of organizing scattered peasant farms and of opening the first path for the penetration of capitalist relations into the countryside".

This can also be seen from the current status of agricultural development in China. Due to the restrictions of the land system and other factors, "capital flows into countryside in today's China still doesn't take the form of scale operation with hired labor, rather it takes the form of commercial companies + peasant household production. Under this form, a profit-pursuing operation of resources is mainly represented by squeezing down the purchasing price offered to peasant households, while increasing the sales price to consumers" (Huang, 2012). It is actually a strategy that capital expands its accumulation from production to circulation through controlling the whole grain industrial chain. Here I will take P township as an example to explore how the capital squeeze profits from the circulation and speeds up accumulation.

Controlling the Upstream and Downstream of the Grain Industrial Chain -- Red Star Rice Company

Red Star Rice Company (hereafter, Red Star), founded in 2006, was originally a small grain processing workshop in P township. Now, it is the biggest "dragonhead" enterprise in P township, which annually purchases about 50% of P township's total grain output. By the end of 2015, Red Star was equipped with three electric grain processing production lines with an annual processing capacity of 70,000 tons of rice. It can be said that Red Star holds a dominant position in the downstream of P township's grain industrial chain. Besides, this enterprise also controls the upstream of the grain industrial chain. The boss's wife runs the largest agricultural materials store in P township, which accounted for nearly 35% share in P township's agricultural materials market. When the land circulation started in 2008, Red Star officially set foot in the agricultural production sector. In 2008, this enterprise first transferred 2,244.03 mu of land in I village, and from 2011 to 2013, totally transferred 966 mu of land in P township (271.94 mu in 2011, 581.86 mu in 2012, and 112.2 mu in 2013). By the end of 2015, Red Star had transferred 3,210.03 mu of land in total, and became the largest transferee in P township. It is no exaggeration to say that Red Star now has controlled the whole grain industrial chain of P township. In this sense, Red Star is a combination of commercial and industrial capital, which is the best representative of "class of capital". It is by virtue of its various positions that Red Star carries out a full range of capital accumulation on the grain industrial chain.

In its publicity, Red Star claims that it mainly adopts an agricultural development model called "company + cooperative + base + peasant households". However, it is not the case. As I have mentioned, the 2,244.03 mu of land transferred in 2008

was subcontracted by Red Star to 7 non-local tenant farmers in 2011. There are three additional conditions: first, the agricultural materials should be purchased in Red Star's store; second, the grain should be sold to Red Star; third, based on the above two conditions, the land subcontract fee is 80 yuan per mu per year, which is relatively less than that paid by other scale farmers. From the land subcontract fee alone, Red Star already can earn an annual profit of about 180,000 yuan. Now, about 2,800 mu of land has been subcontracted by Red Star to a total of 11 nonlocal tenant farmers, while the company itself only directly cultivates about 400 mu of land. Obviously, the final purpose of Red Star in transferring land on a largescale is not the land subcontract fee, rather its dominant position in P township's grain industrial chain.

The upstream agricultural material sector. In 2008, there still existed about 10 agricultural materials stores in P township, which did not include some little chain stores distributed in the villages. The main clients of these stores were the numerous peasant households and a group of "middle peasants" at that time. On the whole, P township's agricultural materials market was in a situation of free competition between these stores. Every store can win over a group of customers by relying on their own social relationships. After 2008, however, the situation begun to change along with the rise of the scale farmers. The relatively balanced situation among the stores has been broken up and displaced by a situation of "big stores excluding small stores". In less than 4 years, about half of the stores closed their doors. Now, there are only 5 stores left in P township: the largest one is run by Red Star; the second largest one is managed by the wife of the Director of Agriculture Office in P township; the third one was opened by an officer of the agro-technical station in P township; and the other two are old stores having been run for nearly 10 years. For the two large stores, their main clients are the scale farmers; while for the latter three stores, mainly provide services to the peasant households. According to the current situation, I forecast the latter three stores will be pushed out of the agricultural materials market sooner or later.

In order to occupy a larger share of the agricultural materials market, Red Star has also provided a service called "buy on credit" (Nongzi shegou fuwu) offering agricultural materials for the scale farmers. From the investigation, I find that only Red Star's store provides this service, while the other four stores rarely supply it. It is mainly because that there should be a large amount of liquid capital as a reserve to provide this service. If not, once the credit fund is too large, then the store faces the great possibility of closing down due to the unbearable huge market risk.¹⁶ In P township, only the Red Star's store owns this scale of economic strength. The service, however, is not provided free of charge, rather it requires additional interest. In fact, it is the company that first lends the scale farmers some money, then the they pay back the principal and the interest at the end of the year. Thus, Red Star can not only earn the interest, but more importantly can expand its market share through attracting some scale farmers who lack liquid capital. With the large-scale of land transfer, Red Star has successfully created a stable market share for itself. It is estimated that Red Star's store took about 35% of the agricultural materials market in P township, which would cover about 20,000 mu of land.

The downstream grain procurement sector. The situation of this sector is similar to the agricultural materials market. Before 2008, there were more than 10 small scale grain processing plants and a group of seasonal grain traders in P township. At that time, the grain procurement market was also in a situation of free competition. After 2008, the rise of the scale farmers brought the reshuffle of the entire grain procurement market: not only did the group of seasonal grain traders disappear, but also many small-scale grain processing plants closed down. Now, there are only three scale grain processing plants and three seasonal grain traders. In this

¹⁶Once I interviewed a scale farmer in A village, an agricultural material store proprietress from the neighbor county happened come to recover about 80,000 yuan of agricultural material fee to this scale farmer. The proprietress cried and begged the scale farmer to pay the fee.

market with fierce competition, the large-scale land possession again put Red Star in a favorable position, which did not only allow the company to obtain a stable source of raw grain, but also promote itself to become an integrated "dragon-head" enterprise with "production, processing and marketing". In order to occupy a larger share of the grain procurement market, Red Star, taking advantage of its own agricultural material store, launched a service called "offsetting the agricultural materials cost" (*Nongzi feiyong dichong fuwu*). The so-called "offsetting the agricultural materials cost" refers to that as long as the scale farmers agree to sell their grains to Red Star, then they can purchase the agricultural materials from Red Star's store without paying immediately; the money can be deducted from their income when selling grains. Influenced by this service, some scale farmers originally selling grains to other companies or traders turned to Red Star. One PCF introduced this service to me:

"All the farm chemicals are brought from Cao Dafu (Red Star Rice Company). (Interviewer: Is it due to the cheaper price?) No, because my grains are all sold to him … I buy farm chemicals in his store, and sell grain to his plant, so I don't need to bring out the money, which will be deducted directly. It is convenient for me" (Qian Jinyang).

It can be said that Red Star successfully kills two birds with one stone – not only to ensure the grain procurement, but also benefit from increased sales of agricultural materials. Therefore, the total amount of grain Red Star purchased accounts for nearly 50% of P township's total grain output, which totally outshines others in P township.

In addition, Red Star as the leader established the "Red Star Rice Specialized Cooperative" in December 2008. This cooperative covers 8,766.76 mu of farmland, which nearly includes all of the land in the three villages that first carried out the land transfer. There are a total of 57 members in this cooperative, in which 6 have

a farm scale above 500 mu land, 5 members have farms between 100-300 mu, 11 members between 30-100 mu, and the remaining 35 members' with below 30 mu. Similar to most cooperatives in China, this cooperative is entirely a "fake cooperative" characterized as a "company swallowing peasant households" and "big households swallowing small households" (Tong & Wen, 2009). One of the main aims in establishing a cooperative is to extract government subsidies. But for Red Star, this cooperative played a more important role. The constitution of the cooperative regulates that the cooperative intends to achieve "eight unifications", namely, "unified seeds supply, unified technical training, unified to promote science and technology, unified land transfer, unified production technology, unified materials supply, unified marketing and unified accounts and distribution". From my fieldwork, there were at least three of the "eight unifications" that have been accomplished, that is, "unified seeds supply", "unified materials supply" and "unified marketing". To be specific, the "unified seeds supply" and "unified materials supply" actually refer to the fact that the seeds and materials supply of the whole cooperative are provided by Red Star's agricultural materials store; the "unified marketing" actually is the grain produced in the cooperative will all be sold to Red Star rice company. Therefore, the cooperative virtually is an important tool for the Red Star company to expand its share in the agricultural materials market and grain trading market, which in turn helped the Red Star company to realize its control of the grain industrial chain in P township.

Via large-scale land circulation, the Red Star company has realized its control of the grain industrial chain in no more than 3 to 4 years. Now in a near monopoly position, its profit has increased rapidly and the speed of its capital accumulation has accelerated. It can be seen more clearly how Red Star pressed down the grain price by virtue of its position in the chain.

Although there are the minimum grain protection prices adopted by the government, these protective prices actually cannot be enjoyed by the grain

producers. From 2014 to 2015, the prices of one hundred jin (50 kgs) of wheat, early rice, medium rice and late rice in P township were 110 yuan, 128 yuan, 130 yuan and 145 yuan respectively. Meanwhile, the national protective prices are respectively 118 yuan, 135 yuan, 138 yuan and 155 yuan. The grain producers in P township stated bluntly: "The protective prices have nothing to do with us. He (the boss of Red Star company) decided the price" (Yang Jie); "The national grain protective prices are useless" (Sha Yunkai).

For the peasant households, they usually dry the grain by themselves and store for a period of time before sale. For scale farmers, however, it is impossible. They have to sell the grain as soon as possible after it has been harvested. It is unrealistic for them to dry the hundreds of thousands jin of grain by themselves. Not to mention that they did not have grain drying equipment and storage warehouse, even so, they do not have the time and energy to deal with this task. As one scale farmer stated:

"Because there is no national grain reserve depot here, which provides them (grain traders in P township) a chance to gain profit. There is a grain reserve depot in Wan Dian (a town near P township), but we don't have so much time. Even if you transport the dry grain to the grain reserve depot, you may be need to wait there for two days. We can't afford the time" (Chen Fuwei).

According to the regulations of Administration of Grain in Anhui province (2014), the grain sold to the warehouse should be of two standards: "the moisture less than 14.5%, the impurities less than 1.0%". If not up to the standards, then deduct the grain's weight. The scale farmers understand the standards, some even own the measuring instruments, but even so, the grain traders still control the measuring standards during the grain trading. Therefore, it is very common to deliberately increase the moisture and impurities points.

"We both believe the grain processing companies deduct too much moisture points. The moisture point of grain is only 23% when measured by myself, but up to 25-27 % when measured by the grain processing companies. The gap is too big." (Wu Jinhua)

"Cao's son (Red Star company) decided prices for rice and wheat. He said 1.1 yuan per jin or 0.9 yuan per jin, and we had to sell at that price. We could not bargain for the price, and they made the decision." (Zheng Guifu)

In addition, the grain traders depress the grain price on the excuse of weather factor and the market factor. One farmer told me how the grain price by the Red Star company was reduced.

"Last year, (he) deducted 2,000 jin from 5,000 jin … At that time, I cannot dry the grain by myself due to the bad weather … He knew you cannot dry the grain, so he depressed the price. I said: 'why you so greedy?' He just replied: 'take you grain home as you like.' How could I take it back? If I can dry it, I would not sell it now. if I didn't sell, the grain went bad … it is the same at other grain companies. No one is good … What can I do? I had to sell to him, which was better than it going bad." (Zhu Hong)

When new grain comes to market, all the scale farmers try to sell their grain as soon as possible due to the lack of drying equipment, which leads to the surge of the grain supply in the market. Taking advantage of this situation, the grain processing companies force the grain price down, because they know if the scale farmers don't accept this price, they will suffer greater loss.

Besides the above means, Red Star also adopts non-economic means of competition to maintain its monopoly position in P township's grain trading market. (It mainly aims to exclude the grain traders from outside. Since coming from outside, the non-local tenant farmers are well-informed enough to know that the grain processing companies in P township depress the price of grains. For example, the same grain can be sold at 142-143 yuan per 100 jin at other places, but can only be sold at 130 yuan per 100 jin in P township. So, some non-local tenant farmers would contact the grain traders from Zhejiang province, Jiangsu province or their hometown to buy the grain. These outside grain traders buy the grain at a higher price than that in P township. What's more, the non-local grain traders directly pay in cash which means that not only the non-local tenant farmers but also the local scale farmers, are willing to sell grain to these outside grain traders. The entry of the outside grain traders has influenced the Red Star's monopoly position in the local grain trading market, which thereby has caused the latter's displeasure. Red Star, therefore, adopted some non-economic ways to restrict the influence of the outside grain traders.

According to "The Administrative Provisions on Grain Purchase Qualification in Anhui Province" (Anhuisheng liangshi shougou zige guanli guiding) (Wanzheng [2012] No. 19), any individual or entity engaging in grain purchasing activity must obtain "grain purchase permit" in advance. If engaging in grain purchasing activity across administrative regions, the individual or entity "should put on record at the local grain administrative department, and industrial and commercial administrative department at county level with copies of grain purchase permit and business license." So, facing competition from the non-local grain traders, Red Star reported to the Grain Administrative Department, and Industrial and the Commercial Administrative Department that some non-local grain traders were engaging in grain purchasing activity illegally. After receiving the report, the related departments would come to check the grain purchase permits of the outside grain buyers.'. For local protectionism, the executive branch of the departments would deliberately put obstacles in the way of the outside grain traders. In fact, most of the outside grain traders indeed didn't were not put on record at the relevant departments. Some outside grain traders were imposed a fine. With these

incidents, Red Star broadcast the news that it was illegal to purchase grain across administrative regions and the grain could not be sold to outside grain buyers. For some outside grain buyers with complete documents, Red Star would take some devious ways to hinder their grain purchasing activities, including puncturing the truck tires, or filling the fuel tank with sand.¹⁷ Via these unfair means, Red Star hindered the outside grain traders to enter into the south part of P township, and largely maintained its own position in the grain trading market in P township, which benefited its capital accumulation through depressing grain prices in P township.

All in all, from the case of Red Star, this research argues that due to the failure of direct management with hired laborers, Red Star gave up the approach of "the real subsumption of labor under capital", and in turn to subcontract the land, which actually transferred the agricultural production sector, the sector with highest risk in the grain industrial chain, to other farmers. Since it gained control of the upstream and downstream of the gain industrial chain, the subcontracting of land didn't weaken Red Star's position. Rather, the agricultural production sector has been incorporated into Red Star's wholly capital accumulation system. Now, the three sectors – agricultural materials supply, production and grain purchasing – have reinforced and promoted each other greatly, which has enabled the Red Star company to grab a high profit from the grain industrial chain in P township.

Entry into the Upstream or Downstream of the Grain Industrial Chain

Although Red Star has a strong control over the grain industrial chain of P township, it does not totally monopolize the chain. P township's scale farmers will

¹⁷ A hearsay from my neighbors.

not be obediently subject to Red Star due to their own self-interest. More importantly, some scale farmers will not just be satisfied with their business interests in the agricultural production sector. Some have begun to enter into the upstream or downstream of the grain industrial chain, and intend to speed up their capital accumulation. Besides, some upper-medium farmers have accumulated some capital by providing agricultural machine services, thus they try to enter into agricultural production through the land circulation.

Direct-purchasing Agricultural Materials and Integrating Agricultural Machine Service Market

At the beginning of the rise of the scale farmers, the agricultural materials market in P township was largely controlled by five stores mentioned above. Due to the monopoly of the five stores, the price of agricultural materials in P township was very high for a period of time. "In 2012 and 2013, the price of fertilizers and farm chemicals in P township was very high. The price of the Volfertile compound fertilizer was 170 yuan for one package (50 kg), while urea was 110 yuan per package (40 kg) at that time. You can image how much money they earned" (Liu Min). For the scale farmers, they obviously are not restricted by these dealers and some have begun to find other ways to purchase cheap, but good quality agricultural materials.

Liu Min is a typical example. Basic information about Liu was introduced in chapter 3; he is a capitalist farmer operating a farm with 404.5 mu of land. Because of his large farm scale and related consumption of agricultural materials, even a slight fluctuation in the agricultural materials' price means a big change in the total production cost. Therefore, in order to avoid the expensive agricultural materials in P township, Liu Min began to look outward for cheaper agricultural materials.

In 2013, the Volfertile compound fertilizer produced in Shandong province was introduced into P township. At the beginning, the price was 180 yuan one package (50 kg), while at the same time, the price of Sierte compound fertilizer produced in Anhui Province was just 120 yuan one package (50 kg). After the trial, Liu found that the effectiveness of the former was indeed better than the latter, as the corresponding amount of fertilizer used was less. For example, the average usage amount of compound fertilizer on wheat was reduced from 90 jin to 50 jin per mu, while on rice it decreased from 120 jin to 70-80 jin per mu. Although the fertilizer cost was similar, the spreading times was reduced when using the Volfertile compound fertilizer, which thus can greatly save labor cost. Nevertheless, for Liu Min, the high price indeed made it hard to accept. Once, Liu tried to negotiate with the local agricultural material dealers to reduce the price, but was rejected.

In this case, Liu chose to contract directly with the fertilizer manufacturer. In 2014, he personally went to Shandong Province to negotiate with the fertilizer manufacturer to purchase the compound fertilizer. After coming back from Shandong, Liu started to post the information on the Volfertile compound fertilizer in the whole of P township. Meanwhile, the manufacturer also began to develop a marketing campaign for local areas. Many scale farmers in P township and around P township were fervently invited to participate in the product introduction meeting at a luxurious restaurant in downtown. In order to occupy the market, the manufacturer provided favorable conditions: buy 1-ton fertilizer and get 3 packages free, priced at 3,500 yuan; buy 3 tons and get 0.5 ton free, priced at 10,500 yuan; buy 6 tons and get 1 ton, priced at 20,500 yuan. With these favorable conditions, the retail price of the Volfertile compound fertilizer was pressed down to 152 yuan per package, even lower. The decline of the fertilizer price was undoubtedly good news for the scale farmers, because it could save nearly 100 yuan per mu on the fertilizer and labor costs. Lured by this preferential price, many scale farmers came to order the Volfertile compound fertilizer. In just one week, Liu Min received orders for about 40 tons of fertilizers.

After that, Liu Min began to set foot in the upstream agricultural material sector. In 2014, Liu built up a fertilizer warehouse in front of his house, in which he stacked all kinds of fertilizers. Some scale farmers I knew would come to purchase the fertilizer with their tractors. Besides, the scale farmers can also order the fertilizer directly from Liu Min, and then the manufacturer would provide a doorstep delivery service. In the morning of May 29th, 2015, I was awakened by the noise of truck outside my window. I opened the window and saw there were two large trucks loaded with fertilizer lined up in front of Liu's warehouse. When I went downstairs Liu Min was chatting with the drivers and meanwhile directing the workers to unload the fertilizers into the specified location. Liu Min told me there were 40 tons of fertilizers brought this time, in which the petty-capitalist farmers Zuo Shunyong and Yang Zhou in G village each ordered 12 tons of fertilizer, and the remaining 16 tons belonged to himself and other farmers. When we were chatting, Liu Min gave calls to the farmers who ordered the fertilizers and told them to come over. Based on observation for a number of times, I estimate the sale quantity of the fertilizers by Liu Min would have been no less than 50 tons in 2015.

Whether Liu Min, as a sales agent, obtained some rebates from the manufacturer or not, I do not know. What is certain, however, is that his production cost was reduced greatly through the direct-purchasing of agricultural materials. If for one mu of land one can save 100 yuan of production cost, then Liu's farm at least can save 40,000-yuan production cost per year. More importantly, Liu had successfully entered into the upstream agricultural materials supply sector and integrated some parts of the grain industrial chain, which definitely increased his profit and accelerated the capital accumulation process.

Liu Min is not a lone case. The three capitalist farmers, who invested to establish the agricultural machine specialized cooperative, also intend to enter into the upstream agricultural machine service sector. Besides obtaining government subsidies, they also aim to integrate the agricultural machine service market in P township.

"Our cooperative will serve the big households … it can help them to solve the issue of finding laborers to a large extent", this is the first. The second is to serve the smaller households (PCFs) with 200-300 mu of land. For them, it is not worth purchasing agricultural machines. So, only if they sign a service agreement with our cooperative, then they will enjoy a one-stop service, including harvesting, baling, plowing and transplanting … it is an agricultural production outsourcing service. With further development, either spreading fertilizer or spraying farm chemicals can both be done by our cooperative. Now, we can do the harvesting, baling and plowing. The next step is the transplanting" (Yang Chunfeng).

Although it is still a plan, what we can ascertain is that these capitalist farmers have strong economic motive and strength to unify the agricultural machine service market in P township. If this goal is achieved, the capital accumulation speed of these capitalist farmers will be greatly accelerated.

Moreover, I did not meet any scale farmers who entered into the downstream of the grain industrial chain – grain purchasing, processing and marketing – in my research. However, some capitalist farmers with strong economic strength have already put this plan into their next stage of development.

In summary, as for the scale farmers with a strong inner impulse to accumulate, they will not just be satisfied with the modest profits from the agricultural production sector only. Rather, they will try to find other ways to enter the upstream or downstream of the grain industrial chain in order to accelerate their capital accumulation. If the various strategies adopted by the scale farmers in the agricultural production sector have represented their aims to maximize the accumulation of capital, then the measures they take to enter the upstream agricultural materials supply sector and agricultural machine service sector, or their attempts to set foot in the downstream of the grain industrial chain have shown that their purpose is to expand the field of capital accumulation as far as possible.

Provision of Agricultural Machine Services

Liu Sheng is aged 50 years old and lives in H village. Now, he operates a farm with 148 mu of land, which is divided into three parts, including 20 mu in his home village group, 31 mu in other villager groups of H village, and 97 mu in I village. The land transfer fee is 400 jin of grain per mu per year, and the transfer time is to 2019.

Long before 2000, Liu had already started to transfer land from his neighbors, with no transfer fee, but he paid the agricultural tax on behalf of the original land contractors. Liu was also a small tractor driver providing plowing services for other peasant households. Around 2004, the scale of his farm reached 50 mu. Due to the abolition of the agricultural tax, Liu has begun to pay a land transfer fee – the maximum is 100 jin of grain per mu per year. Along with the expansion of the farm scale, a serious shortage of family labor has emerged, especially at harvesting time. In order to solve this issue, Liu spent 55,000 yuan to purchase the first harvester in H village. Then in 2010, Liu again spent 50,000 yuan to purchase a large tractor. So far, Liu operates 50 mu of land on the one hand, while on the other, he provides agricultural machine services to other peasant households.

In 2012, non-local capital began to enter into H village to transfer land. During this process, Liu lost most of the land he original transferred, and was only left

with 20 mu of land in his home village group. Liu stated that at that time he didn't continue to transfer land, "mainly because I didn't have so much money; in addition, the village cadres also would like to transfer the land to big households uniformly, so they didn't want me to cultivate. After the big households came, the village cadres came up to me and expressed their ideas, so I gave the land to the big households". Despite the loss of land, Liu's agricultural machine service business has been guaranteed. Because the non-local scale farmers in H village didn't buy a large tractor or harvester. The plowing and harvesting of 822 mu of land on two scale farms were both completed by Liu.

Although Liu didn't transfer the land at first, he, fortunately, obtained two opportunities to transfer land in the second half of 2014. The first was provided by a dairyman in H village who ran away and abandoned 31 mu of land due to having no money. In order to prevent land abandonment, the villagers actively found Liu and encouraged him to cultivate the land with a price of 300 jin of grain per mu per year. Being land hungry, Liu immediately agreed to transfer the land and took the initiative to raise the land transfer fee to 400 jin of grain, which helped him to be in great favor with the villagers. The second is a village group in I village which had dissension with the original scale farmer due to problems with the land transfer fee, thus the villager' group actively connected Liu and transferred the 97 mu of land to him. With the expansion of farm scale, Liu again spent 70,000 yuan (deduct 30,000 yuan of state subsidies) to buy a large tractor in 2014. Thus, in 2015, Liu operated a farm with 148 mu of land on the one hand, while on the other, he continued to provide an agricultural machine service with his two large tractors and one harvester.

Similar to other farms, Liu mainly planted wheat and medium rice. Table 6.4 shows that the annual net income of Liu's farm is around 90,000 yuan. Liu is able to earn this higher income largely because of his own large agricultural machines.

Table 6.4 The costs and benefits of Liu's farm production, 2015 (max/max)

	Medium rice	Wheat
Plowing*	17	17
Seeds	49	72
Farm chemical	70	30
Fertilizer	116	86
Harvesting**	49.5	49.5
Labor cost	135	
Yield	900	550
Value	1260	577.5
Land rent	540	
Net income	606.5	

(yuan/mu, jin/mu)

*: One large tractor is worth 50,000 yuan at purchase and generally can be used for 10 years, so the annual cost is about 5,000 yuan. Liu operates 148 mu of land, therefore the average cost is 34 yuan per mu.

**: One harvester is worth 51,000 yuan at purchase and usually can be used for 3.5 years, so the annual cost is about 14,600 yuan. Liu operates 148 mu of land, then the average cost is 99 yuan per mu.

Liu stated that one large tractor can plow about 1,400 mu of land one year on average, then two tractors can plow 2,800 mu of land per year. The prices of plowing services for wheat and rice are 40 yuan per mu and 60 yuan per mu respectively. Estimated from these prices, the maximum gross income for two tractors is 140,000 yuan per year. Subtracting the fuel cost at 34,000 yuan and mechanical repairs at 10,000 yuan, the annual income of these two tractors is about 96,000 yuan. While for the harvester, which can cover about 900 mu land per year, the harvesting price for wheat and rice is 60 yuan per mu and 70 yuan per mu respectively, thus the maximum gross income of the harvester is about 117,000 yuan every year on average. Subtracted the fuel cost at 40,000 yuan and mechanical losses at 15,000 yuan, one harvester can bring Liu a maximum net annual income of about 62,000 yuan. Totally, two large tractors and one harvester can generate an annual revenue of 158,000 yuan on average for Liu.

In summary, from agricultural production, Liu can earn 96,000 yuan per year; from

agricultural machine service, Liu can get a revenue about 158,000 yuan. So, bout 2/3 of Liu's household income comes from the provision of agricultural machine services. Obviously, the former income can not only ensure the simple reproduction of the farm, but also allows Liu's family to have a decent income. The latter income, on the one hand, ensures the updating and upgrading of the agricultural machines, on the other hand, supplies a part of the surplus for expanded production. In two years, by virtue of the surplus from agricultural machine service, Liu actually obtained some surplus, accumulated a certain amount of capital, and successfully transferred 128 mu of land. It can be contemplated that Liu will continue to engage in the business of agricultural machine service and seize any opportunity to expand his farm scale by relying on the surplus from his businesses. Thus, the size and speed of capital accumulation will expand and accelerate, if all other things remain equal.

Although the case of Liu has its own particularity, the approach he adopted to accumulate surplus from the business of agricultural machine service provision is widely adopted by the upper – and mid – medium farmers in P township. Before the non-local industrial and commercial capital transfer of land in 2008, the spontaneous "middle peasants", like Liu, had already acquired land at a low price. One can imagine that if there were no external influences, these "middle peasants" undoubtedly would have been able to accumulate capital and expand their economic strength slowly through spontaneous land circulation. The entering of the industrial and commercial capital took away the land from the "middle peasants", and also interrupted their gradual process of capital accumulation. Under this situation, a part of the "middle peasants" have survived and transformed into medium farmers, furthermore, they found another way of accumulation. Fortunately, the entry of non-local capital has integrated and opened up P township's agricultural machine service market, which provided these medium farmers with another way to accumulate capital. The surplus from the agricultural machine service would be, on the one hand, used to update agricultural machinery

or to purchase more machines; on the other hand, it could be converted into capital to transfer land.

Accumulation from Projects

Since the 1990s, the State has been providing various types of agricultural projects to promote the development of agriculture. In order to obtain these projects, fierce competition has broken out among local governments. Some scholars have already argued that local governments mainly rely on attracting "dragon-head" enterprises and the scale farmers in seeking and implementing such agricultural projects. By doing this, the local governments intend to create a typical example and to present their political performance within the shortest time (Chen, 2014; Sun, 2014; Gong, 2015). The research in P township also confirmed this view. During the process of the application and establishment of a province-level modern agricultural demonstration zone, the main carriers of P township are the "dragon-head" enterprises and the scale farmers. In return, mainly all the agricultural projects, including the agricultural machine subsidy project, the soil-testing project and so on, are all arranged to them. It is no exaggeration to say that a collusive relationship has been formed between local government, "dragon-head" enterprises and the scale farmers during the process of agricultural modernization in P township – the local government aims to enhance its political performance, while the latter two look for their self- interests. From the research, I found that the "dragon-head" enterprises and the scale farmers mainly employ two ways to obtain funds from the agricultural projects: in the name of "dragon-head" enterprises or by forming specialized cooperatives.

In the Name of "Dragon-head" Enterprise –Red Star Rice Company

Taking the Red Star as an example, this company was named a "dragon-head" enterprise of F County in 2006. Then in 2009, it was granted the title of "dragon-head" enterprise at the municipal level; and in 2013, it was honored with the title of "dragon-head" enterprise of Anhui province. The reason why I take Red Star as a typical case for discussion is that in the construction plan of the modern agriculture demonstration zone in P township, this company was identified as a main actor in the grain processing sector in the downstream of the grain industrial chain, and its grain production base has been recognized as a core component of the modern agriculture demonstration zone.

The reason Red Star is able to achieve such status lies in its contribution to the establishment of the land circulation market in P township. As mentioned above, when there was about 10,000 mu of land that had been consolidated at 2008, no one dared to transfer the land. At this critical moment, Red Star accepted the "political mission" and pioneered to transfer in 2244.03 mu land, which not only helped the P township government to solve an extreme problem, but it also helped to stabilize the nascent land circulation market in P township. Red Star's entry into the agricultural production sector through the large-scale transfer of land has become a pioneering work and a significant achievement of the F county government in the exploration of "speed up the development pace of modern agriculture, enhance the level of agricultural industrialization" (F County Agriculture Committee, 2014:86). With this large-scale land transfer by Red Star, a good impression of P township has been given to the upper-level governments. After obtaining the national agricultural project, P township could not only complete the project requirements well, but also could promote land circulation

and agricultural modernization in a smooth and orderly way. Borrowing one sentence from the Director of Agriculture Office in P township, "(P township) earns face not only for the County, Municipality, but also for the Provincial government". In addition, Red Star has also become an important support for P township to apply for national agricultural projects. A project plan book of P township in 2011 proposed that "taking the Red Star Rice Company of F County as the dragon-head to organize the peasant households to carry out standardized production, and to develop a rice standardized production base covering an area of 5,000 mu". In the same year, P township government also intended to build the land transferred by Red Star as "the standardized production demonstration zone of green food", and apply for national land consolidation project funds of about 2.04 million yuan. In short, Red Star has become a business card and a symbolic model of P township's agricultural development. Whether the leaders are from provincial or municipal levels, they are usually guided to visit Red Star. In 2012, a new cement road was built from west to east in Red Star's land transfer zone in order to facilitate the inspections of government leaders.

But when all levels of government have obtained their "political achievements" from this source, Red Star lost a lot of money after the land transfer. In the Spring of 2009, about 500 mu of land has been abandoned due to poor farm management. The average yield of the left over land was no more than 500 jin of grain per mu. In the mid-July of 2009, about 800 mu of land had been wasted due to the lack of labor. The Red Star company lost about 2-3 million yuan in 2009 alone (Feng, 2015a:49). According to the estimation of a Red Star's boss, his company lost a total of about 5 million yuan in the first three years after the land transfer.

Of course, the model of P township cannot fail. The local county and township level governments not only gave direct subsidies to Red Star, but also steered agricultural projects to it. For example, with a project called "the raw materials (rice) production base of the green food and the rice processing project", Red Star

about 600,000-yuan special support funds for agricultural obtained industrialization in 2009. In 2010, with a changed name called "the construction of the high-quality rice base and the product deep processing project", the above same project also brought 10.68-million-yuan government-guaranteed bank loans to the Red Star company. In 2011, Red Star was awarded a 6 million in support funds for the expansion of a rice drying production line and 20 grain dryers. In 2012, F county arranged the mechanized transplanting pilot project for Red Star with an annual fund of 500,000 yuan for five years and 8 imported rice transplanting machines worth about 880,000 yuan. In addition, Red Star also established a rice production cooperative and an agricultural machine cooperative in 2008. In the name of these two cooperatives, Red Star obtained a large amount of national political subsidy. For example, with the name of "Red Star Rice Specialized Cooperative", "the raw materials (rice) production base of the green food and the rice processing project" of 2009 again brought 100,000 yuan support fund and 500,000 yuan low-interest bank loan to Red Star. It does not mention the various types of agricultural machines freely obtained in the name of the agricultural machine cooperative. In 2015, Red Star was authorized to build a grain storage center with 20,000 tons of storage capacity. Only from the data I have, Red Star has already gained various types of support funds no less than 10 million yuan since 2008. The rapid rise of Red Star in recent years is also confirmed by the local villagers.

"Cao is awarded as the National Model Worker of the year. We were all the same at a few years ago, but he suddenly got rich. The main reason lies in the thousands of mu of land at I village. At that time, there was none who dared to transfer the land, but him. He is the first one dare to eat the crab … So, he got the government support immediately. After that, the government is obliged to support him. (If he) doesn't own ten million of assets, then millions of assets at least. Soon, he will build two warehouses, which even doesn't have to pay for. The government has supported him 1.5 million. Now, he is the National

Model Worker, which is unique in this municipality … Cao is also typical in F County now." (Qian Jinyang)

There are 16 "dragon-head" enterprises in P township, including 1 provincial level, 11 municipal level and 6 county level enterprises. However, only Red Star can constantly receive the national agricultural projects and obtain benefits from these projects. It is because on the one hand Red Star is the only one "dragon-head" enterprise at the provincial level, on the other hand, and more importantly, Red Star has undertaken the "political mission" in the process of P township to establish the modern agricultural demonstration zone, which brought high "political achievements" for the local governments. Obviously, the partnership between Red Star and the local governments will be increasingly close. So, the local governments are willing to give the agricultural projects to Red Star, while by virtue of this opportunity the Red Star can just continue to obtain various government subsidies and input them into its expanded reproduction.

In the Name of Specialized Cooperative – Rich Harvest Cooperative

In May 2014, F county government issued the "Notice Forbidding to Burn Straws" (*Guanyu jinzhi fenshao jiegan de tongzhi*) to prohibit burning straw and promote the comprehensive utilization of crop straw at the same time. P township as an agricultural town is the center of this work in F county. However, due to the lag behind the work of comprehensive utilization, forbiddance to burn straw was met with fierce opposition from the farmers, which also became a headache for the local officials. But the capitalist farmer Yang Chunfeng found a business opportunity from the government's trouble. He first rented some straw balers from another county and made a trial on his own farm. After the trial, Yang found these

straw bale machines can effectively handle the issue of the straw. So, he reported his trial result to P township government and consulted the relevant preferential policies and subsidies. Under the support of P township government, Yang mobilized other two capitalist farmers who together established the "Rich Harvest Agricultural Machine Specialized Cooperative" (hereafter, Rich Harvest Cooperative) in July 2014. In the beginning of the establishment of the cooperative, they had already invested about 832,000 yuan to purchase 5 sets of straw bale equipment. These 5 sets of equipment functioned effectively and handled more than 2,000 tons of crop straw in the second half of 2014. Although the cooperative received some government subsidies, it didn't make a profit in the first year. With regards to Yang and his partners, it didn't matter whether they earned money or not in the first year. What was important is that they successfully helped the local governments to solve the straw issue. After that, their cooperative received considerable support from the local governments.

In the construction plan of P township's provincial level modern agricultural demonstration zone, there is a very important item, that is, the socialized service of the agricultural machine. This aspect includes the construction of "Agricultural machine service street" (*Nongji fuwu yitiaojie*) and "Modern Agriculture Exhibition Hall" (*Xiandai nongye zhanshiting*). In fact, the buildings of the "street" and "hall" have already been built, while the socialized service of the agricultural machine has not been realized. There were already 4 agricultural machine cooperatives in P township, however, due to their weak economic strength, these cooperatives didn't have the ability to undertake the mission of the socialized service of the agricultural machine. Now, the Rich Harvest Cooperative appears to have this ability, So P township government conferred the construction missions of the "street" and "hall" to Rich Harvest Cooperative, and freely allocated three office rooms to Rich Harvest Cooperative in the second half of 2014. Until July 2015, the "Modern Agriculture Exhibition Hall" has come into service. Some agricultural machinery dealers from other places have stationed themselves in the

Hall. Yang introduced me to the functions of the "Agricultural machine service street" and "Modern Agriculture Exhibition Hall":

"We are ready to sell and promote the new agricultural machines here. I will try some new agricultural machines first. After having a try, then I will put them into the exhibition hall to sell and promote. I expect to integrate the sale, promotion, service and maintenance together, that is, one-stop service … if the big households want to purchase the machines, they can see (how the machine functions) on my farm. After that, if they think it is good, then they can buy it in at my store. If they have any problems, they can come to my store for maintenance."

Whether the "Agricultural machine service Street" and "Modern Agriculture Exhibition Hall" can really function as Yang's above description or not, I don't know. But what is certain is that the "street" and "hall" have become "image projects" (*Xingxiang gongcheng*) of the modern agricultural demonstration zone.

The "image project" created by Rich Harvest Cooperative is more than these two. Another important one is the establishment of a modern seedling factory. According to the introduction of P township officers, the mechanized transplanting always was a bottleneck to the modernization of P township's agriculture. Although the F County Agriculture Committee has already provided many funds and equipment to Red Star to carry out the trial, it has not been successful. Besides, Yang stated, "many people are reluctant to invest, because the investment is relatively large, while the risk is considerable and the benefit is low". Therefore, the P township government began to mobilize Rich Harvest Cooperative to make a demonstration. Three shareholders of the Rich Harvest Cooperative knew that if they want to earn the government's support, they should take the risk of investing first. "The invested capital in modern agriculture at the provincial level is in the order of tens of millions. If the local government doesn't do anything, this large amount of money will not be allotted. But the county government stipulated that no matter what they do, it should not be operated by the local government. (It should be) that individuals invest first, then the (local government) gives support" (Yang Chunfeng).

In fact, the real purpose of the upfront investment of Rich Harvest Cooperative is to establish a partnership with the P township government – the former one assists the latter to earn a large amount of project capital from the province, while the latter one provides support to the former. Yang clearly pointed out this meaning: "Although this is my private investment, it is actually to make an image project for the local government".

In July 2015, the seedling factory project officially started to build. Near the town center, the P township government appropriated and allocated 15 mu of land to Rich Harvest Cooperative to build the seedling factory. As to why they chose here, Yang explained: "that place is decided by the town government, because that is the agricultural machine service street, which can better show that P township is the agricultural demonstration zone of Anhui province. There is a requirement in the province, that is, they must have a spectacle (in every demonstration zone)". The Rich Harvest Cooperative raised a total of 2 million yuan to build up the seedling greenhouses with automatic temperature control and purchase the mechanical equipment. In April 2016, the seedling factory was completed and put into operation. When I visited it, I saw a big sign was erected at the factory gate, which said that "The Experiment Demonstration Base Subsidized by the National Grassroots Agricultural Extension Projects" (Quanguo jiceng nongji tuiguang buzhu xiangmu shiyan shifan jidi). It means that the seedling factory of Rich Harvest Cooperative has become an important "image project" not only in P township, but also in F county. Learning from Yang, the cooperative has received

200,000 yuan in subsidies from the national mechanized transplanting project, and 100,000 yuan in subsidies from the national agricultural industrialization project. In addition, with the support from the P township government, three shareholders of Rich Harvest Cooperative have successfully transferred land in the second round of land circulation in March 2016.

From the example of Rich Harvest Cooperative, we can see that in the name of the specialized cooperative, industrial and commercial capital can successfully achieve accumulation from national agricultural projects. Unlike other scale farmers, these industrial and commercial capitalists have the economic strength to invest a large amount of money, and they also can bear the risk of failure. They adopted a similar way to the "dragon-head" enterprise, that is, help local government to solve the issues first, then build up a partnership with the local government, and finally obtain the local government's supports. It can be contemplated that the Rich Harvest Cooperative will also receive a significant amount of money from this collaborative relationship.

In conclusion, it is only the "dragon-head" enterprise and the industrial and commercial capital has the possibility to accumulate capital through national agricultural projects. The reason why they can do it is mainly because they have the strong economic strength to complete the government's "political mission", which could bring a loss in many cases. But, in completing the "political mission" is very helpful for the local government to make some "political achievements" and earn various types of agricultural projects from the state. Thus, the "dragon-head" enterprise and the industrial and commercial capitalists can build up a cooperative relationship with the local government.

Summary

This chapter has mainly illustrated the various accumulation strategies adopted by the capitalists in P township's agricultural sector. I argue that the class of capital does not operate in a single way for capital accumulation, but in multiple ways. The accumulators take various strategies to realize rapid capital accumulation across multiple industries as well as the whole grain industrial chain.

First, the most common way that the scale farmers accumulated capital is through production. There are mainly three ways: 1) the diversification of product/planting structure, that is, the diversification of grain crops, the planting of cash crops and the production of green and organic products. The main purpose of this way is to increase the output value of the land in a limited time. 2) labor supervision, including, the "hard supervision" relying on the external management system; the "participatory supervision", where the scale farmers become personally involved in the daily production together with the workers; and the "soft supervision", which is based on the social norms in the acquaintance community and intends to promote the self-supervision of the workers. These three ways of labor supervision are used to avoid the issues of "show up for the work but contribute non-labor" and "focus on quantity over quality". 3) the improvement of mechanization and chemicalization and adoption of new agricultural techniques. This strategy is an attempt to make the agricultural sector more like industrialization and make it much easier for capital to control the agricultural production process. By doing this, the barriers to capital accumulation can be removed. In short, the above three strategies adopted in the production sector are a kind of productive strategy of accumulation, which intends to promote "the real subsumption of labor under capital".

Second, in addition to the accumulation in production, capitalists also attempt to realize accumulation in circulation. In the "dragon-head" enterprise, capital will transfer out the production link purposely after it has controlled the upstream and downstream elements of the grain industrial chain. Relying on the control of both sides, the "dragon-head" enterprise will do it best to squeeze the profit in the production link. This is actually a vertically integrated strategy. By doing this, the "dragon-head" enterprise can obtain the profit and realize capital accumulation much more easily. It avoids undertaking the various uncertainties and risks in the production link. To some scale farmers and agricultural machine service providers with sound economic strength, based on the original link (upstream or production link), they can try to expand to other parts of the grain industrial chain, and broaden the range of capital accumulation.

Third, the "dragon-head" enterprises and the industrial and commercial capital with considerable economic strength can also realize capital accumulation from the state agricultural projects. This strategy is based on establishing a cooperative relationship with the local government. The enterprise and the capitalist assist the local government to make "political achievements" and establish the modus operandi, while the local government awards the national agricultural projects to them. It is in this partnership that the "dragon-head" enterprises and the industrial and commercial capitalists can gain a large number of national subsidies from the various agricultural projects. This strategy can only be adopted by the "dragon-head" enterprises and a small number of industrial and commercial capital with considerable economic strength.

The adoptions of the three capital accumulation strategies vary from person to person. The "dragon-head" enterprises and a small number of industrial and commercial capitalists with considerable economic strength can take all three strategies to realize a more comprehensive and rapid capital accumulation. The general scale farmers mainly employ the strategies in production, which is a relatively slow capital accumulation strategy. It can be foreseen that the gap between different scale farmers will become wider.

In chapter 5, I examined how the capitalists successfully entered into the 295

agricultural production of P township by relying on the scale managerial experience and the agricultural production techniques learned from non-local tenant farmers. Here, I offer evidence that the capitalist already can realize capital accumulation and the expanded reproduction through various strategies. As a matter of fact, some large capitalists, the "dragon-head" enterprises, and industrial and commercial capitalists, already can accumulate capital from non-production sectors, and from which they can obtain much more profit than from the production sector.

So, with these capital accumulation strategies, the capitalists have changed the agricultural sector in P township into the following situation: in production sector, the capitalists realize "the real subsumption of labor under capital" through direct farm management with hired laborers; in other sectors, through economic or non-economic means, the capital made the seemingly independent small-scale farmers and low/mid-medium farmers become integrated into the capitalist agriculture system, and realized "the formal subsumption of labor under capital". The dominant position of capital in P township's agricultural sector is very stable and increasingly reinforced.

Chapter 7: Agrarian Struggles in Rural China

The previous chapter discussed four types of New Subjects of Agriculture in P township, and illustrated their structural locations in the capitalist agricultural production system. However, the changing production relations have not been examined yet. It is worthy to note that agrarian change is a process of redistribution of interests, and thereby it inevitably generates conflicts and struggles among different parties. For example, would "middle peasants", who rented in their land through spontaneous land circulation, give up their land and related interests to others without resistance? Would agriculture workers obey employers' demands for increased workloads and reduced wages? Would scale farmers make a concession to grain traders and decrease the price of their products? In this chapter, my study on agrarian change will shift from an economic-sociological perspective to a political-sociological perspective.

The main actors in the agrarian change process in P township include "middle peasants" who rented land through spontaneous land circulation, the four types of NSAs that emerged due to "capital flowing into the countryside" and the differentiation of peasants, grain traders, peasant households who have circulated their land to others, as well as the local government of P township. In fact, as my study will show, the cooperation and struggles among these actors have shaped the dynamics of the agrarian change in P township over the past ten years (2007-2016). This chapter, therefore, will illustrate how these actors cooperate, struggle and mutually shape each other. By examining the dynamic relationships among them, we can develop a systematic understanding of the structural changes discussed in previous chapters.

In addition, while I discuss the struggles among different actors, I will also explore the possibility of the formation of new agrarian classes. In order to understand the formation of classes, we should bear in mind that class, as E. P. Thompson (1966:9) argued, is not a structure or category, "but as something which in fact happens (and can be shown to have happened) in human relationship." Moreover, E. P. Thompson highlighted human relationships within class, in particular the common experiences and collective interests of men in the same class. Byres further indicates that, in addition to the study of human relationships within a class, we should also examine relationships among different classes. As he argued:

"Our chosen problematic dictates that we be concerned, in equal measure, with both subordinate and dominate classes … The one cannot be understood without the other. They are constituent, and mutually determining, parts of a whole process. To isolate them form one another is an act of distortion, which will severely hinder one's comprehension. Thus, one will be unable to penetrate satisfactorily the nature of class formation and class action among, say, subordinate classes, without grasping the manner in which dominate classes emerge, or have emerged, and the way in which they pursue their interests, and vice versa". (Byres, 1981: 406)

However, we need to be clear that, "all such struggles are shaped universally but not exclusively by class dynamics, which combine in complex ways with structural sources and experiences of other social contradictions" (Bernstein, 2010: 117).

In chapter three, I employed the "four key questions of political economy" raised by Bernstein to distinguish different agricultural producers. In this chapter, I will continue to use the "four key questions" to examine the relationships among different actors and their relations to four main resources including land, labor, agricultural machinery services and agriculture products. It is because that these resources and production relations and market relations built on them are the basis of the agrarian class structure. To be specific, I will present how different actors, in order to pursue their interests, fought for these resources underground or publicly; and how and why resources flowed to certain actors. Nevertheless, it does not mean other factors like culture, morality and values are not important for class relationships. I will also bring cultural factor into the discussion of class relationships in this chapter.

This chapter has four sections. The first section will illustrate struggles over farmland which involved the local government, middle peasants, scale farmers and peasant households. The second section will present resistances and cooperation in the production process. First, I will discuss how the relationship between agricultural machine service providers (mid-medium farmers and upper-medium farmers) and scale farmers (capitalist farmers and petty-capitalist farmers) evolved from confrontation to cooperation. Second, I will examine how agricultural workers (low-medium farmers and small-scale farmers) developed different strategies to struggle with scale farmers. The third section will concentrate on struggles and cooperation among different actors in the grain circulation process. My fieldwork showed that scale farmers and grain traders, to pursue their common interests, have changed their relationship from confrontation to cooperation, while medium farmers and small-scale farmers have no choice but to endure the squeeze of the grain traders. The last section will present struggles for more subsidies and favorable policies from the local government. My fieldwork experience shows that scale farmers have the capacity to pressure the local government to grant them subsidies and favorable policies.

The Struggles about Farmland

Land is the most important means of production in agriculture. The transformation of the mode of agricultural production, therefore, starts from the change of land relationship. Under the encouragement of the central government and the promotion of the local government, land in the P township started to be concentrated in the hands of scale farmers in 2007. Middle peasants, who had benefited from spontaneous land circulation, have taken continuous collective action to resist this process. In general, they have employed two strategies to interact with the local government, including "a war of words" and "informal land circulation". For peasant households that have circulated their land to others, their main concerns were whether they could get their land rent in a timely manner. Thus, when it comes to land rent, there are inevitable conflicts among peasant households, scale farmers and the local government. Moreover, since there is a large number of peasant households, the scale, power and influence of their resistances are much greater than that of the middle peasants.

War of Words: Middle Peasants VS Local Government

Middle peasant grumbles about the land consolidation project have been documented by two studies on agriculture production in P township (Sun, 2015; Feng, 2015a). The two studies, however, regarded the words of middle peasants as complete "social facts", and ignored other information that was hidden by their words. Compared to the previous studies, I will not only examine the experiences of middle peasants, but also analyze the discourse of government officials. Based on my fieldwork, I find that the story is not exactly the same as that of middle peasants. Additionally, when I compared middle peasant words and official words, I discovered some hidden meanings in both groups, and their intentions to fight with each other. Even though land is the key target for both sides, their words neither put emphasis on land, nor revealed the true story. Their words tended to highlight aspects which were to their advantage, and hid aspects which were to their disadvantage. In general, both sides of the debate were 'beating around the bush' and hiding their real intentions.

Mr. Cheng, the vice mayor of P township, is in charge of agriculture. When I interviewed him for the first time, he indicated that some middle peasants, in order to protect their own interests, have obstructed the promotion of the land consolidation project. As he mentioned:

Our major problem is that some people have farmed here before the land was leveled, and these lands belonged to their relatives and friends. At that time, little land was circulated at a low price. These people are the ones who opposed the land consolidation project the most. They are the vested interest groups. They farm 30 to 50 mu land, and some of them farm 100 mu land with no land rent or very low land rent, since their relatives and friends don't farm these lands any more. ... Now, after we leveled the land, villagers still don't farm themselves, but sign contracts with village committees, and let the village committees subcontract the land on a large scale. The price is 540 yuan per mu, so it is 2160 yuan for four mu land. This is a fixed income for villagers. But for these who rented land in the past, their interests have been hurt. So they oppose this project ... and they make trouble ... They find different ways to obstruct the project. Every village has this problem.

The words of the vice mayor revealed some facts, but also covered others. He revealed that the cause of middle peasants' opposition is that their own interests were undermined by the land consolidation project. Indeed, after the land was leveled, the majority of the middle peasants lost their access to land in the project zone, while the remaining middle peasants who still had land found that they were located in the non-project zone where land had not been leveled yet. Since the interests of middle peasants were violated, as Mr. Cheng pointed out, they resorted to various ways to obstruct the promotion of the land consolidation project, which in turn prevented large numbers of peasant households from getting higher land rent (400 jin of grain per mu per year). It appears that this logic is clear and reasonable. But we have to ask why the words of the official emphasized "the land

consolidation project" and "land rent" particularly?

As discussed above, de-collectivization led to the fragmentation of land and the deterioration of agricultural basic facilities, which further undermined the development of agricultural productivity and modernization in P township. There is no doubt that the land consolidation project has indeed improved the production facilities and productivity of agriculture in P township, and therefore has benefited local villagers. Additionally, after land was leveled, the formal land circulation promoted did indeed increase land rent, and thereby improved the income of local villagers, which made local villagers more willing to circulate their land to others who offered higher rent. One local villager commented:

If the (land) rent increased, I would not give my land to others to farm, even my own brother. If I rent my land to individuals, I could only get 400 jin rice and get paid in the second half of the year. But if I let the village committee subcontract my land, I could get 500 jin of grain per mu and have the cash immediately. So of course I would rent my land to the village committee.

The local villager's statement shows that the two points mentioned by the government officials have become the consensus of local villagers, and the land consolidation project has indeed benefited the majority of local villagers in P township.¹⁸ The consensus, of course, was not pre-existing, but was reached after local villagers experienced the benefits of the official land consolidation project.

According to the words of the government official, middle peasants who opposed the land consolidation project that would benefit the majority of local villagers, are the vested interest group that undermined the public interest for their own individual interests. Thus, middle peasants have no moral stance to oppose the

¹⁸Local villagers only criticized the effect of the project, not the project itself. For example, a small-scale farmer in A village mentioned: "The project is good, but the effect is not very good."

project of the local government. On the other hand, in the official words, the local government is interpreted as the defender of the public's interests, and thereby have a moral advantage to promote its project. The official words, which emphasized "the land consolidation project" and "land rent", therefore, are used to prove that the land consolidation project is in the interests of the broad masses in P township; and the masses do not oppose the project, except these selfish middle peasants who hurt public interests for their own benefits. Nevertheless, the official words overstated the overall effect of the land consolidation project, which could be shown by the scale farmers' complaints mentioned in the previous chapter.

The weapon of words, however, is not monopolized by the local government. Middle peasants also employed words to fight the official statement. Similar to the local government official, middle peasants, considering their own interests, chose to reveal and hide some social facts. Moreover, middle peasants' words revealed some social facts which were hidden by the official words.

In the official words, middle peasants have undermined and obstructed the promotion of the formal land consolidation project. Middle peasants however objected to this accusation raised by the local government. Based on the middle peasants' words, I found that middle peasants did not oppose the land consolidation project. Instead, they even welcomed the promotion of the project. It was because middle peasants knew that land consolidation is good for farming, even though they farm only a small piece of land. By examining middle peasants' interpretation of the land consolidation project, we can check their strategies of discourse. For example, one middle peasant commented:

They (local government officials) took our land. If you did that for our village interests and created high-quality farmland, we would be okay with this project. But they (local government officials) had not started to level the land yet. I stated my opinion in a meeting. I said that we definitely welcome the project of

making high-quality farmland … What is more, he (Mr. Cheng, the vice mayor of P township) committed a big crime (implying Mr. Cheng embezzled the funds of the project). These high-quality farmlands are not developed according to a high standard. (Feng Hailiang)

In the above statement, the middle peasant first disclosed his attitude to the land consolidation project, such as "we would be okay with this project", "we definitely welcome the project of making high quality farmland". By stating that, he attempted to object to the moral accusation imposed by the official statement, and thereby keep their moral advantage in this debate. Second, the middle peasant claimed what he truly objected is the outcome of the land consolidation project implemented by the local government — "these high-quality farmlands are not developed according to high standards", and the local government did not start the project yet. Based on the middle peasant's words, we could see that middle peasants attempted to oppose the moral accusation imposed on them, and they also pointed out the falseness and hypocrisy of the local government. In the middle peasant's statement, local government officials were interpreted as unkind officials who deceived the masses and the upper-level government, while middle peasants are fighters who stand up against them and defend the interests of the masses.

Moreover, middle peasant words re-constructed their own images and that of the local government. First, the local government was described as a gangdom-like government. One middle peasant stated:

At one time, someone voiced his opinion, and Cheng asked someone to beat him. This is what he did. If someone doesn't obey, he would send someone to beat him … There were dozens of men who came and beat villagers. So common people do not dare to express their opinions. The government is like a gangdom. (Feng Hailiang) Second, they interpreted themselves as weak "peasants" who have been oppressed by the local government, have no future, are marginalized and could not sustain their livings. Some middle peasants stated:

I have to farm on more land. Even though I farm on 20 mu land, I could hardly support my family. The living expense is high, and I have to pay for my kid's college tuition. I have been farming in my village during the whole time, not migrating to the city to *dagong*. (Zhu Tian)

We are just taking one day at a time. There is no future. (Hu Hejing)

Our living is not easy. But there is no other way. (Yang Jie)

Genuine peasants like us have lost our jobsMy family's income depends on farming. I have to support my kids to school and my mother who is 90 years old. Farming is the way I support my whole family; Now, my family has no way to live. The machines become useless; Peasants like us have been marginalized. We have no land to work on. (Feng Hailiang)

However, it is worthy of note that, similar to the official words, middle peasant words also revealed and obscured some facts. What they revealed is that their living got worse after they lost the land. One outstanding example is that their income has declined. What they obscured is that they hoped the land rent would stop increasing, and that the previous spontaneous land circulation would be sustained. If the P township government would stipulate the land rent at 200 jin (100 kilograms) grain per mu after the land was leveled, middle peasants would not object to the project. But since the land rent had already been raised and accepted by local villagers in P township, if middle peasants opposed the rise of land rent, they would stand on the opposite side of the majority of local villagers. Therefore, middle peasants had to seek other ways to struggle with the local government. In addition to deconstruct the image of the local government, middle peasants also criticized other activities of the local government, such as the land deposit policy. One middle peasant Yang Jie argued:

"It is unreasonable for us to pay a 60 thousand yuan deposit … I have already paid land rent, why should I pay another 60 thousands yuan of deposit. And if I rented the land for six years, the deposit will be detained for six years … The land deposit hurts the development of my farming business … This policy of the local government is not good. We wanted to raise our opinions, but there is no way for us."

Yang's statement shows that he attacked the land deposit policy, not the land rent policy. In his understanding, a 600 yuan per mu land deposit policy is not reasonable, not the 540 yuan per mu land rent which obstructed the land circulation. The opinions of middle peasants played a role and caused argument among local government officials. In a symposium on land circulation which was organized by the P township government in July 2015, the secretary of I village committee Mr. Zhou and Mr. Cheng, the vice mayor of the P township, had a conversation as follows:

Mr. Zhou: I think 450 to 500 jin of grain per mu (as land rent) is reasonable ... But 600 yuan per mu land deposit is indeed too high.

Mr. Cheng: The deposit has to be paid. If you don't have the money, then you do not rent the land. If you don't farm anymore, I would confiscate the deposit.

Mr. Zhou: I think 200 to 300 yuan per mu for land deposit is more reasonable.

Mr. Cheng: I don't agree with Mr. Zhou. If the land deposit is too low, it may cause many troubles.

— A Symposium on Land Circulation, July 24th, 2015

Mr. Zhou's opinion was supported by the secretary of E village committee, Mr. Wang. He mentioned the land deposit should have different standards for locals and outsiders. For outsiders, land deposit is necessary. Mr. Wang argued: "We will give a suggestion to the government, outsiders have to pay the land deposit … If someone left, we could take his deposit and refuse to let him rent the land in the next year." On the other hand, it is not necessary to take land deposit from local villagers. As he mentioned: "Most of them (people who rented land) are our villagers. They are locals … and they would not run away. So it is okay (for them not to pay land deposit)."

The middle peasants' suggestion of abolishing land deposit policy also divided the alliance between the local government and scale farmers. Scale farmers in P township also believed the land deposit policy to be unreasonable. One scale farmer argued:

We signed 12 years' contract with H village. If one mu land is 600-yuan deposit and detained for 12 years, I lose a lot of interest. I say the policy of Cheng (the vice mayor of the P township) does not work well … I rented about 300 mu, so I have to pay 180 thousand yuan to the town government. I have to borrow 180 thousands of yuan from the bank and pay the interest, but the town government would not give me any interest. (Liu Feikun)

If the land deposit is so high and I don't have enough money, I could not rent the land to farm anymore … I have to pay 60 thousand yuan as a deposit. If I borrow the money from the bank, I have to pay over 10 thousand yuan of interest. So only someone who has enough money could rent land in the future. (Wu Hanyun) It should be noted that middle peasants also hid their real intention in their discourses. They actually objected to the local government because luring large-scale farmers to invest and thereby increasing land rent has made it more difficult for them to rent land. Middle peasants were extremely unwilling to see a rise in land rent, as one of them argued:

"The big households raised the land rent, and increased our costs … I farm over 40 mu land, and only give 100 jin (50 kilogram) rice per mu. But now, I have to give 300 jin (150 kilogram) rice per mu. If the big households did not come here, I would not have to give such high land rent." (Yang Huoliang)

Whereas, middle peasants did not express this opinion directly in their discourse. As mentioned above, objecting to the rise of land rent would lead middle peasants to the opposite side of the majority of local villagers, so they had to find other ways to defend their interests.

It is evident that middle peasants were not willing to lose their land which their livings and businesses relied on. But they had no strong capacity or reasons to publicly obstruct the land consolidation project promoted by the local government or the increase of land rent. Middle peasants hoped their discourse could challenge the authority and moral stance of the local government. They even hoped that someday the majority of local villagers in P township would side with them to fight against the local government for taking their land. However, it seems that local villagers, who have benefited from the relatively high land rent, were not willing to support middle peasants. As a result, the discourse resistance of middle peasants was largely a weak and symbolic resistance only.

On the contrary, local government officials did not have to argue with middle peasants to prove the legitimacy of their actions, since they have the strong bureaucratic authority. But why did the local government take the strategy of making a discourse? In my point of view, although the local government could employ their strong bureaucratic power to promote land consolidation project and land circulation by force, it might affect social stability if the project was objected to by a majority of peasants. Mr. Cheng explained:

It is to respect their (peasant households) feelings, and in the hope of reducing conflicts during the implementation of the project … But even this is a good project, it takes some time for the masses to accept it.

In order to promote the land consolidation project and land circulation, and reduce the possibility of social conflicts, therefore, the local government engaged in the public debate and managed to get consent from the majority peasant households.

Middle Peasants Transferred Land as Underground Party

By engaging in the "war of words", middle peasants did not win their rented land back. Whereas the informal land circulation activities of the middle peasants actually helped them to get access to some more lands. "Informal land circulation" means the circulation of land among local villagers and middle peasants. According to the official procedures of land circulation, land should be transferred from individual peasant households to village committees, and the latter will subcontract the land uniformly. While "informal land circulation" is where villagers get their land back from the village committee in the name of "cultivating by themselves" and then renting the land in private to others, in particular middle peasants. The informal land circulation activities had a negative impact on the formal land circulation market, and that is why middle peasants who actively engaged in informal land circulation were called the "underground party" by Mr. Cheng. Nevertheless, according to the local regulation of land circulation, the local government had no effective way to constrain such informal land circulation activities.

As discussed above, due to the disparity of land rents, the majority of peasant households were willing to subcontract their land through the formal land circulation market. Whereas, if middle peasants could afford the same or nearly the same level of land rent in the formal market, some peasant households were still willing to circulate their land informally. My fieldwork found that informal land circulation mainly involves relatives, clansmen and strong neighborhood relationships.

Sun Wenqiang and Wang Yong in A village are the ones who rented land through the informal land circulation in the early years. They rented land in the Wang village group which had over 40 peasant households and over 260 mu land. After land was leveled in 2014, Mr. Sun, the head of Wang village group, held a meeting and asked villagers' opinions on land circulation. After the meeting, villagers decided that they will not send their land to the village committee to subcontract, but keep the land for individual villagers. In this context, Sun and Wang started their informal land circulation activity. They successfully rented 210 mu of land for six years from 33 peasant households in the Wang village group at the price of 300 jin (150 kgs) grain per mu per year.

Sun explained that there are two main reasons why peasants were willing to circulate their land to them at a relatively low rent:

(First,) because majority villagers belong to two big clans in the village. They have many relatives, so they would rather rent their land to relatives, not to the village committee or outsiders.

(Second,) There is another reason why peasants are willing to rent their land to us. If they don't work outside anymore and returned back to the village, they may not be able to get their land back from the village committee. But we promised them that if they returned (from outside), we will give their land back to them \cdots If you signed the (land circulation) contract with the government, you will be constrained by the contract and could not claim your land back before the contract expires . So they think if they rent land to us, they could more easily get it back.

For Sun and Wang, although they could not have the land circulation subsidy from the local government (60 to 70 yuan per mu), the informal land circulation still benefited them in two ways: first, they did not have to pay the high land deposit fee; second, they could farm the land first and pay the rent later (land rent was paid on the 10 November every year), while if they rent land from the formal land circulation market, they had to pay the rent first before they work on the land. These two benefits indeed decreased the financial pressure on middle peasants. Through informal land circulation like this, Sun and Wang successfully rented land and transformed from middle peasants to petty-capitalist farmers.

Fang Ying from G village also rented land in the Xu village group in the same way. The Xu village group had two villager production teams which included 40 peasant households. These families belonged to four clans, including the Fang, the Zhang, the Xu and the Yu clans, and the first two clans were the largest. According to the P township government's regulation, after being leveled, the land was "confirmed its rights but not its location". But the Xu village group did not follow this regulation, and granted land to individual peasant households. It was aimed to avoid conflicts among peasant households. After the land was leveled in 2008, villagers divided the land into two sections according to the previous boundaries of the two villager production teams; moreover, they further divided the land according to different clans, so that "the Fang clan is on one side, and the Zhang clan is on the other side, in order to prevent conflicts between the two clans."

Mr. Fang is the leader of the Xu village group. His clan is the largest one in the village, and he has 12 cousins in the village production team. His cousins' families had 70 mu land out of the total 300 mu land in Xu village group. G village started to circulate land in 2008. But considering the land was still "newly cultivated land", there were no scale farmers competing for the land. But when I interviewed Mr. Fang in 2015, he told me that "the land is much better now. It is ripened", so he decided to rent all the 70 mu land to farm in the next year. Mr. Fang mentioned:

I had an agreement with them (his cousins who owned 70 mu land in total). I will rent these lands from them, not from the town government. If I rent the land from the town government, I have to pay 600 yuan per mu as a deposit. But if I directly rent the land, I don't have to pay for the deposit … I also pay for 400 jin of grain per mu (the same with the official price) … Since they are my own brothers, a formal contract is not necessary. All of them have agreed. They wanted me to rent their land. They said … if they rented land to others, they might not be able to get their land back when they return home. But if they rent their land to me, after two or three years, when they come back home, they could simply ask me and get their land back. It is much more convenient.

Since the land rent is the same, Fang's cousins were willing to rent their land to him. The informal land circulation seems to benefit both sides. For Mr. Fang who rented the land, he did not have to pay the 600 yuan per mu as a deposit; while for his cousins who rented out their land, they were not afraid they might not get their land back when they returned to the village. After the first round of land circulation became due in G village, Mr. Fang successfully made informal land circulation through his relatives and the clan, and rented over 70 mu land from his cousins.

After they lost the land at the initial stage, middle peasants found another way to rent land, which was renting land through their social relationships with their relatives and clans. Via informal land circulation, many middle peasants successfully rented some more land. Moreover, their informal land circulation activities even threatened the formal land circulation market to some extent. Facing the challenge from middle peasants, both local government officials and village leaders mentioned they could not let the formal land circulation market be dismantled since they had made a lot of effort to establish it. Thus, they also started to discuss how to stop this tendency. Fang Yinhua, an accountant from I village indicated that the informal land circulation promoted by middle peasants might impede social stability, as she argued: "From the perspective of the government, we have to be concerned about this situation. Informal land circulation is without the participation of government. If it involves large amounts of land, it may cause some troubles and make a huge impact." Thus, at the symposium on land circulation on July 2015, Mr. Cheng, the vice township mayor outlined a guideline to prevent informal land circulation promoted by middle peasants. The strategy of "guiding" (shu) is that leaders in villagers should broadcast the government policy and persuade peasant households to let the village committee circulate the land in a unified way; while the strategy of "preventing" (du) is to increase the land rent to exclude middle peasants and prevent them from renting and farming the land. Whereas, the effect of these two strategies needs future research.

In brief, it is clear that middle peasants attempted to protect the informal land circulation among peasants, but that the local government tried to protect the formal land circulation market, in order to avoid social conflicts and safeguard social stability. Although the local government and middle peasants had different opinions about how to circulate land and circulate to whom, both of them supported land circulation. The conflict between the local government and middle peasants, therefore, did not affect the development of land circulation.

A Case of Collective Resistance of Peasant Household

During my fieldwork in P township, I encountered a public conflict between a village group in I village and a scale farmer about land rent. It is the only collective conflict over the farmland I observed¹⁹. Since this kind of conflict is rare, many local villagers heard about it and had something to say.

A major character in this incident is a capitalist farmer Liu Guanshan, who is a 50 years old grain trader. He rented the warehouse of the grain station in P township and I village, and purchased and dried grain with his partner. But after 2015, the warehouse in P township was taken back by the local government, so he could only continue his business in I village. He purchased over two thousand tons of grain every year. In addition, he started to rent land in I village in 2012, and also rented land in H village in 2013. At the end of the year of 2015, he had rented 820 mu of land in total.

The land in I village is composed of half polder and half hills. The land level project was mainly conducted in the polder area instead of the hilly area. It is because the land in the hilly area is narrow and too costly. But after villagers in SZ and ST village groups saw others had circulated their land out and got land rent, they also asked the I village committee to circulate their land, since most of their land was lying waste. Facing the request from villagers, the I village committee rented land to Mr. Liu. On June 2012, Mr. Liu and the I village committee signed a land circulation contract, and rented 190.93 mu land from 2012 to 2020. But since these lands were not leveled, the land rent was 350 jin of grain per mu per year, which was 50 jin of grain lower than that of the polder area.

¹⁹During my fieldwork, I only heard two collective disputes. One was this incident. The other was a dispute between villagers in K village and a vegetables company over land rent.

This land consolidation project, however, caused conflicts between villagers and Mr. Liu. In 2013, the city Land and Resources Bureau contacted the I village committee and suggested to fund the village to level all the 700 mu of land in the hilly area, including the land of the SZ and ST village groups. As indicated by the accountant, Fang Yinhua, in I village: "We did not know the land will be leveled. If the Land and Resources Bureau did not contact us, this project would not be started". Since early 2014, the land consolidation project started and was completed by the middle of the year, while Mr. Liu continued to rent the land. However, the contract signed in 2012 did not consider the land consolidation project or indicated the amount of land rent after the land was leveled. A common practice in P township was that in the first year after the land is leveled, the rent is reduced by half. Hence, there was a disagreement between villagers and Mr. Liu: should the land rent be 350 jin rice or 200 jin rice? In order to decide the amount of land rent in 2014, leaders in I village and Mr. Liu had a meeting, and villagers from SZ and ST village groups also attended the meeting. During the meeting, the village leaders persuaded Mr. Liu to pay 70 percent of the land rent (280 jin of grain per mu). Mr. Liu agreed to their proposal and paid 280 jin of grain per mu in 2014. Villagers attended the meeting also agreed with this proposal.

However, this agreement still caused a conflict. After Liu harvested rice and prepared to turn over the earth, villagers from the SZ village group came to stop him. It was because some villagers found that the land rent was reduced from 350 jin of grain per mu to 280 jin of grain per mu. As mentioned above, villagers attended the meeting had agreed on the reduction of land rent. So, why they disagreed the agreement now? The reason is that, pointed out by the accountant from I village, "Although some villagers from the SZ village group agreed, those who worked outside disagreed with the reduction of land rent." Since majority young and middle-aged adults worked outside, the majority of villagers who stayed at home were old and weak. According to Ms. Dai, the leader of the village group, only 12 out of 32 peasant households attended the meeting. Therefore, when

villagers who worked outside returned home, they refused to accept the agreement approved by less than half of the peasant households. In addition, they requested Mr. Liu pay 350 jin of grain per mu in 2014, and 400 jin of grain per mu in 2015.

Facing the request from villagers, the I village committee hoped Ms. Dai could persuade villagers to accept the agreement of the previous meeting, and only charge Mr. Liu 280 jin of grain per mu. But Ms. Dai replied that although she is a leader of a village group, the land is owned by all villagers, so this agreement had to be agreed by all villagers. On the other hand, Mr. Liu directly objected to the villagers' proposal and stated he would not pay more rent. He argued that compared to other large scale farmers, the rent he paid is 20 percent higher, so he could not and was not willing to pay an even higher rent. In this situation, villagers from SZ village group stated that they would rather use the land to grow trees instead of renting it to Mr. Liu, and they even cut off the water supply to the land which was rented by Mr. Liu.

Even though the I village committee organized multiple negotiations, both sides refused to make concessions, so all negotiations failed to settle the dispute. On October 2014, villagers sent an ultimatum to Mr. Liu in which it was stated that if he did not pay the land rent before 18 October, they would take their land back. On 16 October, Ms. Dai, the leader of the village group, called a machine operator Liu Sheng from H village, and asked him to turn over the earth on 18 October. When Mr. Liu heard the news, he immediately called the police and attempted to prevent villagers from ploughing the land. Liu Sheng also called Ms. Dai to handle the situation. Villagers from SZ village group and Mr. Liu had a dispute. The police came to the village, but retreated while they figured out the cause of the dispute. Without help from the police, Mr. Liu eventually failed to prevent villagers from turning over the earth. But he angrily warned Mr. Zhou, the secretary of I village, that if he could not settle this, he was going to sue the village committee, since "the contract we signed has come into effect and was stamped by the Rural

Economic Work Station."

Moreover, the machine operator, Liu Sheng also participated in the dispute. After the land was leveled, villagers hoped Liu Sheng would rent and farm on their land. Liu Sheng accepted the proposal of villagers and brought production resources immediately, and sowed seeds in the land. Hence, the incident now involved three parties (including local villagers, the village committee and the capitalist farmer) had turned into a dispute included four parties (local villagers, medium farmer, the village committee and the capitalist farmer). Among them, the local villagers and the medium farmer were on one side, and the village committee and the capitalist farmer were on the other side. Over time, this dispute became a conflict between villagers from SZ village group and the I village committee, while the conflicts between the medium farmer (Liu Sheng) and the capitalist farmer (Liu Guanshan) become more obscured.

The activities of villagers from the SZ village group and Liu Sheng made the I village committee furious. Ms. Fang, the accountant of I village argued: "According to the law, villagers from the SZ village group have violated the contract. They signed the contract with us and rented their land for eight years, but now they rent their land to another person." To deal with this problem, the I village committee took some passive strategies. First, the village committee refused to sign a contract with Liu Sheng or buy agricultural insurance for him. Mr. Zhou, the secretary of the I village indicated that the village committee would not break the contract with Liu Guanshan since it would be violating the law. Second, when villagers invited a businessman from Zhejiang province to the village to develop a tourism project, the village committee also refused to sign a contract with him and eventually forced the businessman to leave. Third, at the end of 2014, Ms. Dai's tenure as the head of village group ended, and the village committee did not organize villagers to elect a new head, therefore the SZ village group had no leader after that.

At the end of 2014, Liu Guanshan mentioned to the I village committee that if he could no longer use the land of the SZ village group, he would no longer rent the land in the ST village group too, as he stated:

I said to the village committee, if they could not settle this dispute, I would no longer rent the land of the ST village group. Because I hired a workers' captain to manage these land, and his wage is over 20 thousand yuan a year … If I only have 100 mu of land to farm, it is not a cost-effective way for me. So I informed the village committee … I plan to quit.

On January 2015, the village committee informed the villagers in the SZ village group and Liu Sheng of the attitude of Liu Guanshan and asked Liu Sheng to sign a land circulation contract. Liu Sheng went to the village committee, but refused to sign the contract. I heard two different versions about why Liu Sheng refused to sign a contract. According to Liu Guanshan, Liu Sheng could not afford the land rent and land deposit, as said, "The village committee asked Liu Sheng to come and agreed to rent him all the 240 mu of land. The land rent is 540 yuan per mu and the land deposit is 600 yuan per mu. Pay the money and you could rent the land. But he couldn't. He does not have enough money." Whereas, according to Liu Sheng, he refused to sign the contract because the village committee and Liu Guanshan tricked him to sign a contract which required him to pay the previous 120 jin of grain land rent in 2014.

On February (2015), the village committee came to the village group to have a meeting, and they asked me to sign a contract. I went there and saw the contract. But it was a contract of 2014. I said: 'I can only sign a contract of 2015. I can't sign the contract of 2014.' If I signed the contract of 2014, I have to pay 120 jin of grain per mu even though I never used the land in 2014. So of course I cannot

sign the contract •••Other villages in the village group also argued: "How could you offer us a contract for 2014? Are you playing tricks with us?" So now the village group and the village committee have a conflict.

After this incident, the land circulation problem was still not settled. The village committee informed Liu Guanshan they will fix this problem and ask him not to quit; but villagers from the village group told Liu Sheng not to worry and to keep growing his wheat. However, in fact, neither Liu Guanshan nor Liu Sheng were worried. Liu Guanshan argued:

I called the village committee yesterday. I told them I was preparing to buy seeds, fertilizers and to hire workers after the Qingming festival. I signed the contract in June, so the contract will end after I harvest the wheat of this season. I have not paid for land rent from June 2015 to June 2016 yet. So I told the village committee, if you cannot fix this problem in two months' time, I will not pay the land rent of next year and I will quit. You have to find someone else (to rent the land). If the land is lying waste, you cannot blame me for it.

While Liu Sheng mentioned:

After I harvest my wheat, I will return the land to them (SZ village group). The wheat output is very low. The output of rice is higher, and its profit is also higher. After I harvest the wheat, and if they don't rent the land to me, their village secretary will have a trouble for the land will be lying waste. So I am just waiting … I don't care whether the land is lying waste or not, but it will mean a lot for the village group.

Until April 2016, this dispute was still not solved. Liu Guanshan did not break the previous contract nor cultivate land, but he also did not have to pay land rent. At the same time, he still enjoyed the subsidy from the local government. Although

Liu Sheng did not sign the land circulation contract and had no agricultural insurance nor the subsidy from the local government, but he could cultivate the land and had a good income. On the other hand, it seems villagers from the SZ village group and the I village committee also were not worried. For villagers from the SZ village group, all they conceded was land rental income, and they did not care who cultivated the land. As a result, as long as Liu Sheng could pay them land rent in time, villagers let him cultivate the land. The I village committee only cared about whether the land was lying waste or not. They did not concern themselves with who cultivates the land. More importantly, the P township government had no intention to intervene in the dispute or to instruct the I village committee to handle it immediately. Consequently, it seems everyone benefits from the current situation.

The collective resistance has features of class resistances to some extent. When villagers realized that their land rent was lowered by 70 jin of grain per mu by the capitalist farmer, they immediately took collective action to resist and effectively defended their interests. Despite this, this collective resistance was not lead by clear class consciousness. What pushed villagers to resist was their traditional understanding—anyone who rents the land has the obligation to pay full land rent—was challenged. That was why they had strong dissatisfaction. But they were only dissatisfied about the amount of land rental income, not the land circulation practice. Therefore, when they got their land back from one capitalist farmer, they immediately rented it to a medium farmer. They did not seize this opportunity to change their disadvantaged position in the land circulation market, but in turn strengthened this market. Consequently, although these collective actions had features of class resistances, it was not a pure class action. Peasant households in P township had no consciousness to break their disadvantaged position in the land circulation market. For local villagers in P township, as long as they got land rental income, they did not care who cultivated their land.

On one occasion, I interviewed a capitalist farmer in H village, during which I mentioned the incident and triggered a debate among villagers at the time. The debate offered me a chance to examine the opinions of different actors.

Sha Yunkai (capitalist farmer): I do not know what happened with Liu Guanshan. I think it is unfair to him. You see, Liu Guanshan cultivated the land for years. He leveled the land, and grew rice for half a year. But they (villagers from the SZ village group) forbade him to grow wheat. He put a lot of efforts into the land just like us. You see, if the land is unleveled, the output is low; after you level the land, you have to fertilize the hard soil; and tractors might sink in the soft soil. But villagers refused to let him grow rice after he cultivated the land.

There was 240 mu land. He only grew wheat on half the land, and then villagers took 150 mu of land back. But you can do nothing about it. The government stands at the side of peasants. They (the government officials) believe you must have much money to rent the land. It cost over 1 million to rent 1,000 mu land; while peasants have few lands and low income. Nowadays, the government is only afraid of peasants making trouble. Peasants take fertilizers and seeds back to their own land, and what could you do about it? Nothing. Even when village leaders and cadres come, they can do nothing about it.

Villager²⁰: The government is not afraid of peasants making trouble. Now *dagong* (working) is hard, and we have to rely on relationships to find a job. Peasants also have to live, so you cannot blame them for that (asking to raise the land rent). Taking the land back from the farmer (Liu Guanshan) is not reasonable since they already signed the contract. But peasants have to support their kids and elderly, and they could not find jobs outside. What else could they

²⁰The villager is a female, who did short time work at a scale farm in H village.

Obviously, Sha Yunkai was very sympathetic to Liu Guanshan's experience. As a scale farmer, his sympathy is based on his similar experiences and feelings with land acquisition. The statement of Sha Yunkai has clearly revealed a collective consciousness and a division between "us" (capitalist farmers like him and Liu Guanshan) and "them" (peasants). Sha Yunkai further emphasized how capitalist farmers like him feel after they have rented land, and spent a lot of time and money to cultivate and improve the quality of the land. Therefore, even though they earned money from the land and became rich, it is the result of their hard work. On the contrary, peasants could not cultivate grain well, and when they saw capitalist farmers cultivating their former land, they attempted to snatch some benefits. The local government, afraid peasants might make trouble, had no way or were not willing to intervene in peasant misbehaviors. Sha Yunkai's opinion is not a single case. When I compare his opinion with Liu Guanshan's statement, I find remarkable similarities in their opinions and logic. For example, Liu Guanshan argued:

They (villagers in the SZ village group) are not good people … Before the land consolidation project, peasants asked the village committee to circulate their land every day. The land was lying waste since no one cultivated it. So I went there and cultivated land for two years. After the land was level in the last year (2014), I only grew rice for half a year. The first year after the land was leveled it was not easy to cultivate. The land was uneven, and tractor constantly sunk into the soft soil. So I had to use an excavator to pull it up. After I cultivated rice for half a year, the land was much better …But peasants in this village group are cunning and unreasonable … When I prepared to grow rapeseed , they prohibited me. I said I have paid the money, but they didn't care, and they asked someone else to grow wheat on the land I rented.

Based on their common experiences and feelings, scale farmers have started to develop a shared consciousness, and they could clearly distinguish their common interests from these of others. Based on the formation of a collective consciousness of capitalist farmers, I argue scale farmers in P township have started to become a class. The statement of Sha Yunkai is what Scott identified as "the straightforward language of narrow economic interests, profit maximization, accumulation, and property rights—in short, the language of capitalism" (Scott, 1985:234). This could also be shown by Mr. Fang, the accountant of I village and Liu Guanshan's emphasis on "law" and "contract". This form of language, therefore, reflected features of capitalist agriculture production relations.

On the other hand, the peasant's discourse had a completely different logic. The villager argued that taking back the land after renting it to others is "unreasonable", but she argued that it is because life is too difficult for peasants. In addition, she indicated life is difficult because there are little employment opportunities outside. Therefore, considering peasants have to support their families, it is acceptable for them to take back their land and hurt the interests of scale farmers; and scale farmers should not blame peasants for this. It is obvious that the logic is not a "modern" capitalist logic, but an "old-fashioned" rural logic. It does not focus on individualized economic interests, property right and legal contract, etc., but peasants' basic right to a living. Moreover, this logic is not only stated by this peasant, but shared by other villagers and middle peasants in P township. As stated above, when middle peasants argued with the local government, they also emphasized "they could not support their living", "life is hard", "losing jobs" and "have no way to live" after their land was taken by the government. However, it should be noted that although middle peasants and other villagers employed this logic, it does not mean they still sit in a pre-capitalist production relation. On the contrary, they have been involved in a capitalist production relation. Additionally, based on their experiences of the current production relation, some of them expected that "the rich will be richer, and the poor will be poorer" in the future.

Nevertheless, the majority of peasants have not developed this kind of consciousness. Even though they participated in the collective action, they had no intention of challenging the current production relations, or resume the previous production relations. Instead, they continued to circulate their land out.²¹

Furthermore, despite the struggles over land usage, local villagers could not prevent the concentration of land in P township. During the nine-years of land concentration, these unharmonious voices and remittances have not prevented the growing picture of land circulation. At 28 February 2016, the first round of land circulation was completed in G, I and J village. In spite of the land rent increasing from 400 jin to 500 jin of grain per mu, the majority of peasants did not claim their land back to cultivate it themselves, which is different from my expectation.²² The land in I village was rented by a national "dragon-head" enterprise to develop "featured agriculture" (tese nongye)²³ in P township; J village was included in a "reform of agricultural supply-front economics" project conducted by the County Development and Reform Bureau, and most of its land was used to grow cash crops instead of food crops; In G village, over 10 peasant households claimed their land back, but over 10 peasant households circulated their land out. Thus, there was over 3,500 mu of land circulated out in the village (accounting for 70 percent of total land). Therefore, I argue that land concentration will become a normality in P township, which will further combine land and capital to promote the development of capitalist agriculture production.

The Struggle and Collusion During the Labor Process

²¹Nevertheless, it should be noted that this non-capitalist rural logic contributed to villagers 'solidarity and resistances.

²²When I was conducting fieldwork in 2015, some peasants in three villagers informed me that after the first round of land circulation, they will claim their land back and cultivate by themselves. Therefore, I predicated that there might be a re-peasantization tendency. Whereas, when I did follow-up visits in these villages on April 2016, I found this was not the case. Majority land was still rented by scale farmers. ²³It refers to raising duck and lobster in paddy fields.

Generally speaking, agricultural production in P township has two different styles: one entirely relies on agricultural machinery, and the other still depends on manual work. In this section, I will discuss resistances and cooperation in the agricultural machine service sector and the manual work sector respectively.

The Struggle and Collusion Among Agricultural Machine Service Providers and Scale Farmers

As discussed in the previous chapter, although scale farmers in P township have enough capital to purchase big agricultural machines, they chose to pay for these services instead of buying machines, for the operation and maintenance of machines is considered complicated. Thus, scale farmers were seeking good and cheap agricultural machine services. My fieldwork data showed that there were many teams operating reaping machines during the harvest seasons in X township, which is separated from P township by river Z. Their work was as good as those in P township and they charged lower fees. However, scale farmers in P township only purchased machine services in P township, not in X township. Why is that? To understand, we should examine the development of the machinery services in P township.

Agricultural machine services started around 2000 in P township. It was middle peasants who provided this service. Specifically, they offered three types of machine services. At first, they provided a reaping machine service. Through land circulation, middle peasants enlarged their production scale and had a higher demand for employment. Thus, they brought agricultural machines to harvest their grains and also provided reaping service to other peasants. Second, they provided plowing services with small tractors. Third, they provided a transport service. These middle peasants usually used a modified vehicle (call as "*bengbeng che*")

to transport grains and building materials, etc.

Since formal land circulation started in 2008, however, the situation started to change. Not only middle peasants started to differentiate, but their machine services also had to be altered. From 2008 to 2010, scale farmers in P township grew double cropping rice, and the shears type reaping machine is suitable for harvesting rice²⁴. However, with the enlargement of the scale of production, small tractors could not fulfill all the production needs, so scale farmers hired large tractors and operators from outside. Nevertheless, plowing land services only accounted for a small proportion of the machine service market, so it did not create a significant challenge to machine service providers in P township. In addition, realizing scale farmers had started to change their demand, many machine service providers took measures and bought large tractors. For example, Liu Changwen brought the first large tractor in J village in 2008, and Liu Sheng brought the first large tractor in H village in 2009. The number of large tractors increased from 0 to 24 from 2007 to 2010 (Chen, 2015:74).

Whereas, with non-local tenant farmers entered P township, they changed the previous production pattern from growing "double cropping rice" to growing "rice and wheat" in 2011. The shears type reaping machines in P township could not harvest wheat, so non-local tenant farmers hired the roller type reaping machines and operators from their hometown or Jiangsu province. This practice significantly challenged the local machine service market, since reaping services accounted for a large proportion of the market. In order to compensate their loss, the local machine service providers increased their charges for plowing services to outside non-local tenant farmers. One non-local tenant farmer commented:

They took advantage of us outsiders in the past. For example, they charged us

²⁴There were two types of reaping machines. One was "shears" type which could harvest rice, but not wheat. The other was the "roller" type reaping machine which could harvest both rice and wheat.

70 to 80 yuan per mu for reaping grain, but operators we invited from our hometown only charged us 50 yuan per mu. Considering the price, we didn't use machines in P township. After we hired operators and their machines from outside for two years, the price here is the same with that in our hometown. (Wang Zheng)

For non-local tenant farmers, they refused to accept the high price charged by local operators, so they hired large tractors and operators from their hometown. Later, even though local operators had the roller type reaping machine, the non-local tenant farmers still hired operators and machines from their hometown to work on their land in P township. One non-local tenant farmer said: "We hired the operator and machine together. They harvested our land one after another."

Inevitably, operators in P township failed to increase the fee for plowing services. What was worse, they lost the reaping market to operators from other places. In order to compete with outsiders, local operators also decreased their charges for machine services. One local operator said: "If I bargain with a boss about fees, he would not hire me, but hire operators and machines from outside." However, for non-local tenant farmers, it is inconvenient for them to hire operators from outside, since they have to pay for their accommodation, food and part of their travel fees. More importantly, if they have an unfriendly relationship with locals, it might have a negative impact on their production and living options in P township. Eventually, operators in P township and non-local tenant farmer reached an unwritten agreement: the former will not charge too much, and the latter will not hire operators from outside.

Although local operators and large scale farmers had reached an agreement, despite there being many operators in nearby towns, scale farmers still did not hire them, as one scale farmer mentioned: "Very few scale farmers rent reaping machines and tractors from outside these days. They used to rent them for outside. But since these machines are available locally, they do not rent them from outside anymore" (Liu Changwen).

The agreement between local operators and scale farmers also included price increases of machine services. In P township, plowing and reaping service fees increased 5 yuan per mu every year. If some operators wanted to increase prices on the pretext of rising oil prices, it would be rejected by scale farmers.

Operators are always asking for a price increase, and they make the excuse that the oil price has increased. In 2013, the reaping service price was 75 yuan per mu. Before that, the price was 70 yuan per mu. The price didn't rise in 2014. He (the operator) wanted to increase the price, but we didn't agree. So the price is still 75 yuan per mu. If the price increases 5 yuan per mu, it would be a burden for me. I have to pay for over 1,000 yuan for the reaping service. The cost is too high. (Zheng Guifu)

On the other hand, local operators seized various opportunities to pressure scale farmers into accepting rising prices. On May 2014, Fan county sent a notice that the whole county could not burn straw, and demanded all reaping machines to install devices to smash straw. Otherwise, the reaping machines would not be allowed to work in the field. This policy gave the operators a justification to raise fees. They listed three reasons to scale farmers. First, it cost 5,000 yuan to install an appliance to smash straw. Second, due to the additional procedure, the operational speed of the reaping machine became slower and consumed more oil. Third, since there are smashed straws in the field, the blades of the rotary cultivator might be damaged. Based on the three reasons, operators demanded a fee increase of 10 yuan per mu for both plowing and reaping services. Normally, scale farmers in P township would not accept this demand and bargain with operators about the price. However, since the local government promised to give them a subsidy, scale farmers in P township eventually accepted this demand.

The reaping machines were upgraded quickly in P township. In 2015, there was a new type of reaping machine with a grain reservoir. Operators in P township brought 13 of them. This type of new reaping machine thrust aside workers who transport grains, which actually saved 10 to 20 yuan per mu labor cost for employers. Therefore, operatives who owned this new type of machine planned a price increase of 5-yuan per mu.

While agricultural machine operators were just planning to raise the price, then the transporters had already increased their fees. Zhang Jianjun, a petty-scale farmer, told me carefully:

Last year (2014), the transport cost was 1 yuan for 100 jin of grain. This year I don't need workers to transport grain from the reaping machine to the truck, and the transport cost is 2 yuan for 100 jin. I don't understand why they increased the transportation fee. In the last year, we had to put grain in bags and carry them to the trucks, and drivers had to help us to put on the bags, but they only charged us 1 yuan for 100 jin of grain \cdots This year, the truck drivers don't help us with the bags as the reaping machine will put grains directly into their trucks, but they charge us 2 yuan for 100 jin. I don't understand this. All of the drivers charge us 2 yuan. I guess all truck drivers in P township had a meeting.

I asked the driver, master Wei: "How much does it cost for transporting grain to I village?" He answered: "Two yuan (for 100 jin of grain.)" I asked: "How about to P township?" He answered: "Also two yuan." I said: "I village is far away, and it only takes two yuan. But P township is very close, why does it also take two yuan?" Then I said: "I will not hire you for now. I will ask others. I will hire them if their price is lower."

You could ask around. All truck drivers demand two yuan. Now they weld a

boxboard at the back of the truck, and they just have to put their truck near the field … Like I said, all truck drivers in P township had a meeting … The reaping service fee increased from 50 to 55 yuan, and I think 5 yuan increase is okay … But I do not understand why the transportation fee increased from 1 yuan to 2 yuan. But even if they increased the fee to 3 yuan, we have no other choice. We don't have trucks, but we need to transport grain.

On the other hand, truck drivers also had reasons to increase transportation fees. It cost them 2,000 yuan to weld iron boxboard at the four sides of the truck hopper. Whereas, the most important reason which enabled them to increase fees is what was pointed out by Zhang — "we have no other choice. We don't have trucks but need to transport grain". Different from reaping machines and large tractors which could be transferred from other places, all truck belonged to local drivers in P township, not transferred from outside. Due to their monopoly in the area, truck drivers have an advantage to increase the transportation fee. In fact, this is the first time truck drivers increase the fee since 2008. Before that, it was one yuan for 100 jin of grain. Consequently, scale farmers in P township accepted the fee increase. Of course, the fee increase will not be too high and beyond the price range of scale farmers. Therefore, there is an informal agreement between scale farmers and truck drivers.

Although agricultural machine service providers and large scale farmers had had been in conflict at the beginning (the conflict is much less fierce than that in the land circulation market), they both realized their common interests and developed a cooperative relationship after some time of bargaining. Nowadays, scale farmers in P township have developed a steady business relationship with certain agricultural machine service providers. Different from the experience of scale farmers, low-medium farmers and small-scale farmers in P township have no choice but to accept the high price demanded by agricultural machine service providers, since their production scale is relatively small and they have limited capacity to bargain with the latter.

The Resistance of Agricultural Laborers

Although scale farmers in P township have mechanized some production procedures, they still have to employ workers for other production processes. In previous chapters, I have illustrated how scale farmers, in order to maximize surplus value, decreased the agricultural laborers' wages (see chapter 4), and employed various ways (such as work regulations and agricultural machines) to strengthened discipline and control over workers (see chapter 6). The management methods of scale farmers indeed constrained the resistances of agriculture workers, the majority of whom tended to endure the discipline and control in the production process. As some of them argued: "I only work for a short-time. I don't want to complain and offend anyone. Even those who work here for a long time don't complain. It is not easy a find a job " (Wang Weiping); "I am getting old and there are few jobs I could find ... I could only work in the field" (Liu Bao). It is manifest that agricultural worker' resistance spirit is also constrained by the labor market: there is limited job alternatives in P township. In order to keep their job, some agriculture workers chose not to resist but to endure exploitation from their employers.

However, it should be noted that agricultural workers in P township are not passive, obedient objects manipulated by their employers. Instead, they have their own agency. Even though they choose to endure, it is a reasonable choice to make considering the labor market. Moreover, agricultural workers are not a homogeneous group. They have different subjectivities due to their different values and situations, and that is why different agricultural workers in P township take different forms of resistances. In general, agricultural workers in P township have developed three

forms of resistance.

This first is a hidden form of resistance, or as Scott (1985) identified it "everyday forms of peasant resistance". Mr. Tao, the Director of Agriculture Office in P township, told me a case of hidden form of resistance on a farm owned by Cao Dafu.

There is a kind of weed called Leptochloa chinensis. Cao's farm had the weed, and he hired workers to pull them out. But they (the workers) only pulled stems and leaves of the weed, not the roots. So Cao kept hiring workers to pull the weed, but it kept growing back. It is difficult to manage these workers. It appears that they worked really hard in the field, but they did not pull up roots of the weed. If a worker is responsible, he would pull up the roots and after one season, the weeds would disappear. But they only pull stems and leaves, and the weeds grow up again in only after few days … Not only Cao had this problem, others had it also.

In 2008, I asked Cao: "What are you doing in the field?" He answered: "Pulling weeds." I asked him: "Are you pulling the leaves or both the leaves and the roots?" He answered: "Both the leaves and the roots." I replied: "Okay. "After half a month, I went to his farm, and saw the weeds in his field. I called Cao and asked him: "Why are there are many weeds in your field?" He was surprised and replied: "How come?" I said: "there are still so many weeds in your fields". He suspected: "Are you sure it is the fields not have been done. Maybe you are wrong?" I said: "I am in the fields now, how could I be wrong? You take the time to have a look". Then he came and indeed saw the weeds. He asked the workers' captain why. The workers' captain replied: "If the weeds had been pulled, how could they grow so quickly?" I told Cao that we should see how workers did their work, and he agreed.

After few days, we came to the field. After the workers done their work, I told Cao: "See? They only pulled the leaves. The weed will grow back in a week." After one week, we came to the field again, and the weeds had indeed grown back. I told Cao: "This is your field, and you are managing. I should not tell you how to do your work. But you should consider the production cost … Some workers are not doing their work well." (Tao Pu)

In addition, in the previous chapter I mentioned a scale farmer, Xu Jianguo, who in order to supervise the labor process and work quality, had promoted some supervision regulations. However, Mr. Tao pointed out that it was not very effective, since it was challenged by the hidden resistances of workers. As he mentioned:

For example, two workers made an agreement that both of them would not work too hard. Some workers' captains tend not to criticize them. You see, a boss might only stay in here for ten years, but workers' captains are local residents and they have to stay in the village for life. So they are not willing to offend anyone, especially their fellow villagers. They grow up together. So workers' captains will not criticize and offend workers. (Tao Pu)

There is no doubt that few agricultural workers have taken the hidden form of resistance. However, according to my observations, the majority of agricultural workers did not take this form of resistance, and some were even opposed to it. It was because this form of resistance contradicted the rural logic of "being a well-behaved and honest person". For majority agricultural workers in P township, they believed they should either do their work well or quit, and it was unnecessary to cheat during work. My observation is also supported by comments from employers. If the hidden form of resistances were popular among workers, employers would complain a lot about it. Nevertheless, during my interviews with employers, they

seldom complained about workers' hidden forms of resistance, and they only mentioned that a few workers were not "responsible".

Scott (1985:35) argues that the everyday forms of resistance, "this is a social movement with no formal organization, no formal leaders, no manifestoes, no dues, no name, and no banner"; this is a tacit and anonymous form of resistance; the impact of this "hidden" resistance can be summarized as "constant dripping that wears away a stone". However, there are three limitations in Scott's argument. First, Scott regarded "peasants" as a homogenous group, that is why they tacitly take the same form of resistances. However, peasants are not a monolithic group. Instead, they have various differences. Second, "much of the everyday-resistance literature posits autonomous and self-determined individual subjects standing behind acts of resistance. In this kind of analytic exercise ... we run the risk of treating subaltern subjectivity as a 'thing' rather than 'a social and cultural formation arising from processes" (Yan, 2008:212). Third, Scott simply regarded some behaviors of the poor, including theft, slaughter of livestock and so on, with "class characteristics". By going this route, Scott has already presupposed there was a kind of "class consciousness", which can be considered as the traditional norms and virtues of a village community, or "villageview" (Scott, 2007:236) the rich should not be greedy and stingy, but should help the poor, should give the poor basic ritual dignity and respect. However, taking these "traditional norms and virtues as "class consciousness" obviously shows bias, which only can be seen as a kind of "identity politics". Whether the "identity politics" can be converted into "class consciousness" or not is another question.

In brief, only a few agricultural workers resorted to hidden resistance, the majority of them did not. In addition, I argue that the hidden forms of resistance are not "class actions" with political meanings. In fact, my fieldwork finds that agricultural workers in P township tended to take two forms of public resistance. The second form of resistance is "exit", which means workers refused to work for certain scale farmers if they are too mean in terms of wages and management in the production process, which could be exemplified by agricultural workers' complaints:

Some bosses are too annoying and greedy. I worked for him this time, and won't work for him ever again … If the boss is not kind, even if he asked me to work, I would not go. (Pan Guangmin)

Dagong (working) is to be bullied. I dislike a boss who supervises me all the time. I would argue with him. I could do my work well without your strict supervision. I hate people watching me all the time. (Xu Feng)

I would quit (if the boss is unkind). Last year, we worked for a boss and cultivated 200 mu land. But he (the boss) did not give me anything (as a bonus), not even a cigarette. (Li Mingcai)

"Exiting" is an individualized and passive form of resistance. By choosing not to work for certain employers, workers could avoid oppression and exploitation from specific scale farmers. However, the cost of "exiting" was that workers might lose their job opportunities. The reason of exiting was not because workers felt they have been exploited, but they believed employers did not follow local social norms in their employment practice. This is part of the rural logic. My fieldwork finds that agriculture workers in P township, based on their rural logic, had developed different judgments about employers: they like to work for those "good" scale farmers, and take the exiting strategy to avoid working for "bad" scale farmers. It is the non-capitalist rural logic that has motivated agricultural workers to take passive forms of resistance.

Although "exiting" is an individualized resistance, it could have a collective

outcome. When a majority of agricultural workers refuse to work for certain scale farmers, they can create a collective pressure, and push the employer to make concessions, such as increasing wages, giving presents to workers and reducing his supervision of the labor process, etc. Moreover, when this kind of resistance accumulates, it finally develops into collective resistances and worker organizations, which will be discussed in the following paragraphs.

The third form of resistance is organized collective resistance. Compared to the passive "exiting" strategy, the organized collective resistance is more powerful and influential. There is a workers group in P township²⁵, which is led by Dai Song, a peasant who lost his land.

Dai Song, 65 years old, is a peasant in E village. When the Red Star Company enlarged its production scale and brought all the 10 mu land from his family, Dai became a landless peasant and a proletarian. While he constantly worked in nearby villages and knew many agricultural workers, he organized a loosely knit group of agricultural workers. Based on his contact list, his group had 21 persons, including 19 men workers and two women workers. The average age of men workers was over 60, while women workers were relatively younger. All of them came from south part of P township, including E, B, A and C villages. Most of their work was short-term, including work on farms and two grain processing factories in E village, and transporting fertilizers in the agricultural material stores. The working area of the group included several villages in the south part of P township, and I village the farthest. This group was gradually organized during the workers' working process, as Dai told me: "I gradually organized these people. I seek laborers in nearby villages to work ... and knew more workers during work. When more and more people joined us, we seek work in nearby villages. I organized them gradually." Dai's statement showed that shared working experiences have helped

²⁵There was another agricultural workers' group in G village and H village which performed moving trees for landscape companies.

to foster a relationship among agricultural workers.

How did this workers' group operate? In most cases, employers call Dai and inform him of the number of workers needed, and when and where to work. After Dai and the employer make an agreement about wages, Dai arranges the workers in a group. All scale farmers in nearby villages knew Dai, and they would directly contact Dai when they need workers. When I interviewed Dai in mid-April 2015, he told me that four scale farmers had already made reservations with him before the wheat harvest month.²⁶

Since there were scale farmers making reservations, how did Dai arrange workers to work? Dai told me that he arranges responsible and reliable workers to work.

To be honest, I have to keep several responsible and reliable persons (in the group). We have many workers, but some of them are irresponsible and bosses don't want them. It is like being a soldier, and (a worker) has to be tested. The bosses don't want unreliable workers … So I will not ask irresponsible persons to work. If I sent them to work, the bosses will complain to me: "Why did you send irresponsible workers?" So I have been responsible for that.

In addition, some free workers also came to enquire from Dai if there are any job opportunities. If there is a job opportunity, Dai would arrange for them to work. According to Dai, he did not have any payment for arranging workers to work for employers or introducing job opportunities for workers.

Although the group was loosely organized, it had relatively strong organizational and cohesive power. Under the leadership of Dai, they bargained collectively with

²⁶The wheat will be harvested in mid-June, so these capitalist farmers made reservation two months in advance.

employers about their wages. Dai mentioned:

In addition to scale farmers in the home village, scale farmers in other villages also hired us. There are many employers, so I won't work if the wage is not high, and I won't ask workers to work. The wage in I village is the lowest, which is only 110 yuan per day, so I will not work there. Nowadays, the wage is at least 120 yuan per day. If the employer offers 120-yuan wage per day, I will ask workers (to work) if they are available. If they don't have time, I would tell the employer we are not available today, and ask him if we could come to work tomorrow. Everyone knows if I called them to work, the wage is 120 yuan per day. There are some employers who directly contact agricultural workers and offer them 110 yuan per day. If they think it is acceptable, they would work for him. But in here, you cannot hire someone with a wage of 110 yuan.

Some scale farmers attempted to bypass Dai and directly contact workers, and hoped to hire them at a lower price. Although there was no written regulation about whether or not workers could take the job offer, workers in the group normally refuse the employers' requests. I am not sure whether a worker faces punishment if he takes a job privately, such as being excluded from the group. Whereas, it seems that workers in the group have developed a shared understanding that they should not work for bosses who offer lower wages. Based on this shared understanding and the organization, the workers' group demanded a wage level of no less than 120 yuan per day, and refused to work at a lower wage level. As indicated in Table 4.9 in chapter 4, among the daily wages in P township's farms, 120 yuan per day was the highest for a male worker. Additionally, workers' wage levels declined from south to north in P township. One of the reason is that there were fewer job opportunities in the north part of P township, so employers could decrease wage rates. While in the middle and south part of P township, in addition to job opportunities on farms, workers could also find other jobs in park companies in the hilly area. My fieldwork shows that a more important reason is that agricultural workers in the south part of P township were more organized. Although the workers' group was loosely organized, it could unite workers and enabled them to bargain with employers over wages. The workers' group successfully forced scale farmers in the south part of P township to increase wage rates.

For scale farmers, a group of agricultural workers who demanded higher wages and had the capacity to bargain with them was not tolerable. Thus, scale farmers like Cao went to hilly areas (such as in H village and F village) to hire cheaper agricultural workers. His intention was obvious. That was, by hiring workers from other villages, he could undermine the market bargaining power of local village workers, and further pressure them to decrease their wage demand. However, the majority of scale farmers did not take this strategy. This was because, first, workers from other villages were not familiar with the water distribution, land situation and soil quality in the village, so their work was not as good as local workers. Second, since the west part of P township is hilly with limited arable land, workers in east part of P township believed themselves were better at cultivating. More importantly, after workers from the hilly areas knew the daily wage of local workers, they also wanted to raise their wage. Therefore, large scale farmers failed to decrease wages, and Dai and his group maintained a daily wage of 120 yuan.

While scale farmers failed to decrease workers' wage by hiring workers from hilly areas, the employment of "fixed casual laborers" actually had some influence on Dai and his group of workers. Dai mentioned: "Some bosses employ fixed workers. So it is not easy for us to find short-term work". The employment practice of scale farmers in P township not only increased control on agricultural workers, but also created divisions among them and decreased their wage level, as told by a workers' captain: "Our (agricultural workers) job is relatively stable. We have work every day. They (agricultural workers) also realized that. One could work 150 days a

year on our farm. Others might have higher wages, but they could only work for a few days" (Hu Fang). Thus, in order to have a stable job opportunity, some agricultural workers agreed to employers' conditions of a reduced wage level, which challenged agricultural workers' groups like Dai's.

There will always be continuous struggles between agricultural workers and scale farmers. The experiences of the workers' group revealed that agricultural workers in P township had created an initial form of organizational capacity and collective consciousness. Although agricultural workers did not use classic class discourse, their actions showed that some of them had developed a preliminary form of "class consciousness". Additionally, their insistence on 120-yuan wage per day also implied the formation of "class struggles".

In summary, facing the control and oppression from scale farmers, agricultural workers in P township have taken various forms of resistance. The majority of the agricultural workers in P township did not take "everyday resistance" identified by Scott, but resorted to public forms of resistance. The most common form of resistance was "exit", which was a passive and individualized resistance. Although his form of resistance was rooted in non-capitalist rural logic, it could create pressures for scale farmers in P township and pushed them to change their employment practices. Therefore, we could not underestimate the influence of the individualized resistance. Furthermore, collective resistance had an even higher influence. Some agricultural workers in the south part of P township created a small-scale workers' group. Although the group was loosely organized, it facilitated agricultural workers to collectively protest against the scale farmers and achieved partial success. It is reasonable to expect that, with the process of capitalization of agricultural production, agricultural workers in P township will develop more organized collective practices.

The Struggle, Collusion and Tolerance in Grain Trading Sector

As mentioned in the previous chapter, the grain market in P township was at a stage of free competition before 2008. There were over 10 grain processing factories and traders who bought grain from peasants. The changes in agricultural production, however, brought changes to the grain trade market. After 2008, the grain market in P township entered a monopoly stage. Not only did numerous traders exit from the market, but also some small-scale grain processing plants closed down. There are only three grain processing factories and three seasonal grain traders nowadays which monopolize the grain trade market in P township. Based on their monopoly status, they have taken various strategies to lower the purchase price for grain in P township to gain higher profits. One outstanding example is the Red Star Company, which has been discussed in chapter 6.

All grain producers in P township, including scale farmers, medium farmers and small-scale farmers, complained about the grain traders' activity of squeezing down grain's price. During my interviews with grain farmers, I constantly heard complaints such as, "There are only two (grain processing factories). You either sell your grain or leave" (Wang Zhengping); "If I don't sell my grain to this factory, I have to sell it to the other. But they are both alike and unkind" (Zhu Hong). One villager commented: "Now selling grain to the factory … is like paying rent to the landlord in the past" (Zhang Wen). Since the government has retreated from the grain market after the opening of grain purchasing and selling markets, it does not directly intervene in the market. The activities of grain traders generated dissatisfactions among grain producers, as one argued: "The government valued large-scale producers. But it did not give us any protection in grain purchasing market yet" (Wang Zheng).

It appears that scale farmers, medium farmers and small-scale farmers were all in the disadvantaged position in the grain market. For scale farmers, their grain output was high, so they were unlikely to dry grains to sell by themselves. In most cases, their grain was harvested and then directly sold to the grain processing factories. For medium farmers and small-scale farmers, the output of their grain was much lower, so they tended to dry grain by themselves and then sold it. They usually stored their grain and hoped to sell at a high price. For example, Mr. Fu, a neighbor of mine, dried and stored his grain and sold it in March and April the next year. Thus, it appears that medium farmers and small-scale farmers had more advantages than scale farmers. But is this really that true? The following section will examine how different grain farmers take strategies to deal with grain traders.

The Struggle and Collusion Between Scale farmers and Grain Traders

In general, scale farmers in P township take three strategies to deal with their disadvantaged position in the grain trade market, including: (1) organizing collective actions, (2) exiting, which is selling grain to outside grain traders, and (3) building a cooperative relationship with grain traders, which is based on their relatively high economic status and their common interests with the latter.

a. Collective Resistance

Since there were only a few grain traders in P township, it appears that their status in the grain trade market is more advantageous than scale farmers. As mentioned above, grain traders in P township, by taking advantage of their marketplace bargaining power, had indeed decreased the grain purchase prices. On the other hand, it should be noted that grain traders were not facing scattered peasant households and weak middle peasants anymore, but a group of scale farmers that had high bargaining power and capable of action. The most united group in the scale farmers is the non-local tenant farmers from Chaohu. When just arriving in P township, they had started "a war of business" with the grain traders in P township. Zheng Guifu, a non-local tenant farmer participated in the process of collective resistance, explained to me what had happened:

When we first came to (P township in 2011) … Cao's son decided prices for rice and wheat. He said 1.1 yuan per jin or 0.9 yuan per jin, and we had to sell at the price. We could not bargain for the price, and they made all the decisions. But at that time, if the price was too low, we wouldn't sell our grain. Instead, we transported it back to our hometown to sell. We'd rather pay 4 cents per jin transportation fee than sell to them. So it is not like we don't have any choice.

One year (2012), the quality of wheat was not very good, and they decided a price of only 0.6 yuan (per jin). My hometown fellows were angry. The price set by the government was 1.02 yuan (per jin). But he (Cao's son, the grain trader) only offered us 0.9 yuan (per jin), even the good wheat. Then my hometown fellows made a decision. We did not sell our grain to him, but transported it all to our hometown.

After this incident, Cao's attitude was much better. So if we united, we could still bargain with him. If all of us don't sell our grain, he had no other choice. Since Cao's company is a grain collecting station, the government must have some grain collecting quota for it. If he could not collect enough grain, he has to purchase grain from outside and pay a higher price. So his attitude is much better now … He offers us relatively higher prices when purchasing our grain.

We asked about grain prices in our hometown. If the price here is okay, then we sell our grain in here. Because if you don't sell your grain to him (Cao), you have to put your grain on the side of the road and guard it every night … Some of us bargain with other grain traders about the price, and if they meet our demand, we would sell our grain to them. We cultivated about 1,000 mu land, and sold all of our grain to the grain trader and filled his warehouse. So Cao did not collect enough grain that year … Anyway, there is a bargaining process between us and grain traders now.

Zheng Guifu's statement reveals that, when non-local tenant farmers just came to P township, the price of their grain was forced down by the Red Star Rice Company. While local villagers were taken advantage of by grain traders in P township since they did not know the grain prices outside, then non-local tenant farmers knew the difference, which generated their dissatisfaction and pushed them to take collective action. Their collective action indeed pressured grain traders in P township to realize they could no longer force scale farmers to accept a low grain price by monopolizing the local market, so they chose to co-operate with scale farmers. Therefore, this conflict between non-local tenant farmers and local grain traders ended with a success for non-local tenant farmers.

Nevertheless, for non-local tenant farmers, transporting their grain back to their hometown to sell was not a long-term solution. First, as stated by Zheng, it took a lot of time and money to transport their grain back to Chao Hu. Second, as mentioned by a non-local tenant farmer: "We have to find someone who is familiar with the business, and he could send a truck to transport our grain and sell it. If someone is not good at the business, even if he transports grain to Chao Hu or the government's grain depot, we might still lose money. Someone good at the business would send a truck from Shandong and take our grain at the road, and then pay us and take the grain" (Zhang Jianjun). After local grain traders changed their attitudes, non-local tenant farmers chose to compromise and sell their grain in P township.

Clearly, the origin of non-local tenant farmers' collective actions was that local grain traders in P township decreasing the grain's price purposely. This is why I term this collective action as "a war of business", which is all about competing self-interests. In this sense, this collective action had features of class actions. Both non-local tenant farmers and local grain traders in P township developed a clear understanding about their own interests, and took actions to defend their interests. After this incident, both of them realized cooperation could safeguard their interests for the long term. If class consciousness is formed when individuals realize that they have common interests with others in the same situation, and tend to take collective actions to defend and pursue their common interests, then non-local tenant farmers and grain traders in P township have already developed an initial form of class consciousness. The spectre of class is haunting in here.

In addition, I could not ignore the key role of localism in mobilizing and organizing this collective action. Localism is not the direct cause of this collective action, but had fostered a sense of solidarity among non-local tenant farmers. Due to the "local and nonlocal" division, non-local tenant farmers developed a strong sense of solidarity and determination which pushed them to take collective actions to protest against unfair treatment.

It is worthy of note that the collective conflicts occur not only between local and nonlocal, but also between local scale farmers and local grain traders in P township, as will be discussed in the following paragraphs. There is an area in the north of A village called "Zhongtang". There were four scale farmers in Zhongtang, and two of them rented land through informal land circulation, and another two rented land through formal land circulation. Since they were located in the same area, the four scale farmers developed a close relationship, as mentioned by a local peasant: "Big households in Zhongtang are very united". (Gui Jin) They not only purchased seeds, farm chemicals and fertilizers together, but they also hired workers and sold their grain together. Their intention was to decrease the prices of production materials and increase the prices of their products through cooperation.

Since they rented land in 2013, the four scale farmers in Zhongtang sold their grain to Red Star Company together. After two years, they believed they had a steady cooperative relationship with the latter, and Cao would purchase their grain at a price that is not lower than others. Thus, at the year of 2014, they did not bargain the price with Cao and directly sent their grain to Cao's processing factory. As one of them recalled:

When we sell our grain to Cao, we thought the price Liu Guanshan offered was 140 (yuan per 100 jin), then Cao would also offer 140 (yuan per 100 jin). But he only gave us 139 (yuan per 100 jin), and deducted 1 yuan for 100 jin of grain. I did not say anything, but I will not cooperate with him next year. (Gui Jin)

Due to the price deduction, Gui Jin lost 1,200 yuan in total. Although the loss was not much, it made the four scale farmers feel they had been cheated. Thus, they decided not to sell their grain to the Red Star Company, but to other grain traders from outside, as Gui Jin remembers:

He (Cao) deducted 1 yuan for 100 jin rice last year, but his business won't be easy this year … When we prepare to harvest grain this year, we will sell grain to outsiders who offer the highest price. It is a little troublesome to sell grain to outsiders. But they (grain traders from outside) pay with cash … and the price they offer is higher.

It is manifest that localism neither prevented the Red Star Company from reducing purchasing price for local scale farmers, nor did it deter the four local scale farmers from protesting against the Red Star Company by taking collective action. It should be noted that self-interests have surpassed the constraint of localism, and collective actions have not been prevented due to localism.

The collective action discussed above shows that scale farmers in P township have developed class consciousness such as "united" and "solidarity" to some extent. It is the class consciousness which pushed them to take collective action with features of class actions.

b. Exit: An Individual Resistance

Even though collective action can be helpful, it cannot be easily organized. Hence, scale farmers, when they felt they were pressured by a certain grain trader, they tended to take individual resistances. The most common form of individualized resistance is to exit, which means they sell their grain to other local grain traders or grain traders from outside.

Zhang Jianjun, a migrant farmer comes Chaohu, subcontracted 200 mu of land from a grain trader at the price of 80 yuan per mu per year in 2012. Since 2013, Zhang sold his grain to Deng, the boss of Fu Xing Rice Company. He stated: "I have been here for four years. I don't sell my grain to either Cao or Wang, only to Deng." According to Zhang, he had established a cooperative relationship with Deng, and the latter offered him a price that was not lower than others. However, after an incident in 2014, Zhang cut off his cooperative relationship with Fu Xing Rice Company and sold his grain to the grain trader who rented him the land. Zhang recalled:

My neighbor cultivated rice earlier than me, so his rice was drier than mine. My rice was cultivated later and a little bit wet. Deng gave him (the neighbor) 138 (yuan per 100 jin), and gave me 137 (yuan per 100 jin). I said: "Deng, you should have some principle. I followed you like a woman and sell all my grain to you. My rice in past years was not wet. Even though my rice was a little bit wet this year, you should not reduce the price. In the past, no one but me sells grain to you; now you can collect enough grain and you don't care about me. This makes me feel uncomfortable"

This year, Deng went to my home. I said: "I am not sure whether or not I should sell my grain to you." I did not say I would not sell my grain to him. I just told him that I am still considering. It would be a good deal for me if I sell my grain to Zhou Guiping. She demanded the water content to be 13.5%, and mine is 14%. I have 100 thousand jin of rice. Even if he deducted the price at 0.1 yuan per 100 jin, I would lose a lot of money.

Deng told me: "Your rice is wet. I will deduct 2,000 yuan from you, and will give it to you around the Spring Festival. But you can't inform your hometown fellows." He treated me as a despicable person, I would not allow that. How could you run your business like this? … He (Deng) told me that the rice is a little bit wet, you should be aware of that next time. Then I would know. I was an old customer to him, when outside traders came to buy grain from my hometown fellows, I did not sell my grain to them, but to Deng. Others sold their grain to others, but I also sold my grain to Deng. But I plan to sell my grain to Cao this year.

Here, we could see the bargaining power of scale farmers, which was based on their production scale. When Zhang knew Deng's price offer was lower than others, he directly indicated his dissatisfaction, and Deng compromised to his demand. Deng promised to give him back the 2,000 yuan with a condition that Zhang would not inform his hometown fellows. The demand of Deng irritated Zhang, and he thought Deng has insulted him. Thus, Zhang cut off his relationship with Deng, and sold his grain to other traders in P township.

Some scale farmers, facing the semi-monopolized grain purchasing market in P township, chose to sell their grain to traders from outside. They have this choice due to their production scale. One hundred mu of land could yield 100 thousand jin of grain per year. Therefore, many traders are willing to come to P township to purchase grain. At the south part of P township, the traffic was not good and two local grain processing factories monopolized the market, so few traders came there to purchase grain; on the other hand, in the north part of P township, the transportation was convenient and there was only one grain processing factory, thereby it attracted many traders. My fieldwork shows that most of these traders came from Shandong and Nanjing, the capital of Jiangsu, and others came from Chao Hu. For example, Wu Jinhua, a scale farmer in K village, sold his grain to a trader from Nanjing. There are two reasons why scale farmers were willing to sell their grain to traders from outside. First, local grain processing factories tend to depress the price of grain. Second, traders from outside not only offer higher prices, but also pay with cash. Wu Jinhua mentioned: "We think local grain processing factories deduct too much money for water content. The water content I measured was only 23, but what they measured was 25, 26 and 27. That is a big difference. So some of us are not willing to sell grain to local factories, but to other grain traders. The price other grain traders offer is two yuan (per 100 jin of grain) higher than the local factories. If there is over hundreds of thousands of jin of grain, the total income would be very different." Thus, about half of the grain was sold to grain traders from outside in K village, L village and M village in the north part of P township.

Other scale farmers chose to dry their grain themselves and transport it to the government grain depot to sell. In P township, two scale farmers, Zuo Shunyong and Yang Zhou sold their gain to a government grain depot in a town adjacent to P township. The price offered by the government' grain depot was higher than that of the local traders. For example, the government grain depot offered a price of

155 yuan per 100 jin rice which was the same with the government protective price. After deducting three jin impurity in the grain, the price was 150 yuan per 100 jin. But with a deduction of 7 yuan for drying and 2 yuan for transportation, the eventual price was 141 yuan per 100 jin. This price is the initial price of grain in P township.

To sum up, while grain traders forced down the grain price, scale farmers had the capacity to struggle with them based on their production scale and their strong status in the market. They could exit or sell their grain to other grain traders from outside or the government grain depot. Thus, scale farmers in P township had choices.

c. Building a Partnership

Although it appears that grain traders were in an advantageous position in the grain production chain, they have to cooperate with scale farmers in order to collect enough quantities of grain. For scale farmers, although they could transport grain to outside markets, it was troublesome. Therefore, as long as the price is reasonable, they chose to sell their grain in P township. After a series of conflicts and bargains, both scale farmers and grain traders realized that only cooperation would bring more interests for both of them in the long term. Thus, in order to pursue their interests, scale farmers and grain traders in P township established a cooperative relationship in most cases.

My fieldwork demonstrates that every grain trader in P township established a cooperative relationship with some scale farmers. As for scale farmers, most capitalist farmers had steady buyers for their grain, while only one-third of petty-capitalist farmers sold grain to fixed buyers. Thus, different scale farmers established different kinds of cooperative relationships with grain traders.

Some cooperative relationships were based on pre-exiting personal relationships. For example, Qian Jinyang in B village has a friendly relationship with Cao, the owner of Red Star Company, so he sold his grain to Cao every year, as he stated: "All of my grain was sold to Cao. We knew each other for over a decade … We used to buy rice and transport rice together, so we have a good relationship." Due to their personal relationship, Qian Jinyang not only sold his grain to Cao, but also bought production materials from Cao's agricultural material stores. Cao, to return Qian's favor, gave new kinds of chemical fertilizers to Qian Jinyang for free and also offered a higher price for Qian's grain (about one yuan per 100 jin higher than the average price). Another example is that She Xiumin in E village sold all of his grain to his neighbor Liu Minghsan, who is a seasonal grain trader, as he mentioned: "I sold my grain to Liu Guanshan. He lives right next to me, and we are neighbors. I have to sell my grain to him. We have a good relationship … If I don't sell my grain to him, he might be dissatisfied" (She Xiumin)

Evidently, some scale farmers were pressured to develop cooperative relationships with certain grain traders. As to the geographical distraction of grain processing factories in P township, two of them are located in E village in the south part of P township, and another in K village in the north part of P township. For scale farmers in the north, they did not have other choices but to cooperate with Jin Fa Rice Company. For example, Quan Cheng in K village had to sell all of his grain to Jin Fa Rice Company. He said: "I sold my grain to Jin Fa Rice Company … There is only one processing factory here. If I don't sell my grain to the company, I have to transport it to E village to sell." According to Quan, it takes more time and transportation costs for him to sell grain to the other two processing factories in Ping village. However, there were some exceptions. Since the scale of two grain processing factories in the south part of P township are larger, some non-local capitalist farmers in the north part of P township chose to create a cooperative relationship with them. For instance, Yang Chunfeng and Xu Jianguo, two scale farmers rented land in J village and K village respectively, were always selling their grain to the Red Star Company. The reason behind their choice is that they hoped a large-scale grain processing factory could maintain a steady sales channel.

I usually sell my grain to Cao, since we have cooperated for a long time. I sold my grain to Wang Jiajin (the boss of Jin Fa rice company) once, and the price was the same. Although my farm is more close to Wang Jiajin, but business is about relationships. I sold my grain to Cao at first, and he brought my grains at a fair price even when the quality (of grain) was a little bit low. After a few years, we developed a good relationship … He also discussed with me about the price. Although there is no built-to-order sales mode, the selling of my grain is guaranteed. This is a business agreement between us. (Yang Chunfeng)

For some scale farmers in the south part of P township, they faced a more complicated situation. There were two grain processing factories in the south: Fu Xing Rice Company and Red Star Company. The two companies located in the same street of E village with a distance of less than 100 meters between them. For scale farmers, establishing a cooperative relationship with one of the factories means undo relationship with the other; and if they have a bad relationship with one factory, they have no other choice but to create a cooperative relationship with the other. For example, Liu Min in E village sold his grain to Fu Xing Rice Company because he had a bad relationship with the owners of Red Star Company, Cao and his son. Liu Min told me, when he prepared to rent land, both Cao and his son came to persuade him not to, as he recalled: "Cao told me, renting land will make no profit. The land is not good to cultivate in the first year, and it will cost me at least 200 yuan per mu." In addition, Cao's son lied to Liu that he was already levelling the land. Cao and his son hoped Liu would give up the idea of renting the land. Liu argued that if he gives up, Cao and his son would rent the land, but peasant households would rent their land to him if he insisted. Since the development of Cao's grain processing factory forced peasant households to

accept decreased prices for their grain, Cao and his son had a bad reputation in P township²⁷. However, after Liu rented the land, he cut off his relationship with Cao and his son. Thereby, he could only build a cooperative relationship with Fu Xing Rice Company in the village.

There is no doubt that there were some conflicts between individual scale farmers and grain traders. Whereas, scale farmers and grain traders as two groups had built a cooperative relationship through their business interactions and formed a community of interests. In this community of interests, scale farmers and industrial and commercial capitals in the grain market worked with each other: while the former controlled the grain production sector by renting land on a large scale, the latter controlled the grain circulation sector. They cooperated with each other and squeezed out other agricultural producers, and occupied dominant positions in the grain industrial chain in P township.

Tolerance: Medium Farmers, Small-scale Farmers and Grain Traders

Could medium farmers and small-scale farmers in P township struggle or cooperative with grain traders similar to the experiences of scale farmers? The answer is no. They lack enough capacity to bargain or struggle with grain traders, and have to endure exploitation from the latter. There are three main reasons for this:

First, medium farmers and small-scale farmers are in a weak position generally. Their production scale was limited, and could only produce thousands or tens of

²⁷This is also demonstrated by my interviews with other scale farmers, middle peasants and local peasants who came into contact with Cao and his son.

thousands jin of grain, which is too small to draw the attention of grain traders. An outstanding example is that grain traders in P township showed little respect to medium farmers and small-scale farmers. They tended to say, "sell it or leave" and "take your grain home as you like". That is why some peasants said selling grain is like sending grain to the landlords' house in the past. By comparing grain traders to landlords, peasants revealed their dissatisfaction with grain traders. Whereas, since they had not developed consciousness like "solidarity" and "alliance" yet, they could only sell their grain to local grain processing factories in P township.

Second, it was difficult for medium farmers and small-scale farmers to contact grain traders from outside. One of the reasons is that they lacked related information channels. It requires a good social and geographical relationship to contact grain traders from outside. However, the majority of medium farmers and small-scale farmers did not have such social capital. The second reason was that even though they could make contact with grain traders, the latter would not come for small amounts (thousands or tens of thousands jin) of grain. In order to attract grain traders from outside, medium farmers and small-scale farmers had to make alliances and sell their grain collectively. But they have not done that yet.

Third, there were limited options for medium farmers and small-scale farmers. There were only three grain processing factories and three seasonal grain traders in P township, so medium farmers and small-scale farmers could only choose among them. For medium farmers and small-scale farmers in the north, they tended not to transport their grain to the south part of P township to sell. Similarly, medium farmers and small-scale farmers in the south part of P township were not willing to sell their grain in the north.

In the cases mentioned above, in order to decrease weight deduction in the selling process, medium farmers and small-scale farmers tended to dry and store grain by themselves, and sell it in March or April of the next year. It is because March and April were the times when grain could be sold at the highest price. However, medium farmers and small-scale farmers could not enjoy the government's protective price. For example, the highest price of japonica rice in P township in 2015 was only 152 yuan per 100 jin, since grain traders deducted some money for impurity substance and water content in the grain. It appears that the price for medium farmers and small-scale farmers' grain was higher than that of scale farmers. This is because grain traders have a relatively high cost to dry grain purchased from scale farmers, while the cost to dry grain purchased from medium and small-scale farmers' grain was higher than that of the scale farmers. Whereas, if we calculated the cost for drying grain, the price for medium farmers and small-scale farmers' grain was actually lower than that of scale farmers. In this sense, medium farmers and small-scale farmers and small-scale farmers who dried grain by themselves, had done much of the drying work for grain traders.

In brief, in the grain trading sector, scale farmers in P township could bargain with grain traders based on their strong economic status. They could pressure grain traders to make concessions by taking collective actions, or sell their grain to grain traders from outside. Due to the strong capacity of scale farmers, grain traders had to cooperate with them. In fact, scale farmers and grain traders have formed a community of interest. As for medium and small-scale farmers, however, they did not have the strong capacity to bargain with grain traders. Due to the fragmentation among them, they have to endure the oppression from the grain traders.

The Struggle for Government Subsidies and Policies

It is manifest that local government in P township has actively pushed for land circulation and facilitated the emergence of scale farmers. With their development, scale farmers have started to pressure the local government to provide subsidies and favorable policies from the bottom up. In the words of the head of the Rural Economic Work Station in P township, scale farmers started to "ask for money and policies" from the local government. Since scale farmers have become the leading actors in the capitalist agricultural production system in P township, they have the capacity to bargain with the local government. More importantly, they raised their demands in a collective and organized way, as will be discussed further.

Take agricultural insurance as an example. Due to the occurrence of the gibberellic disease, the winter wheat output in P township dropped significantly in 2013. Since this land was covered by insurance, the local government asked the insurance company to investigate and compensate for the production loss. After investigation, the insurance company proposed a compensation of 20 yuan for per mu. However, this proposal was rejected by scale farmers in P township. They claimed this compensation standard was too low and proposed a compensation of 70 yuan per mu. The insurance company refused the demand of scale farmers. According to the compensation standard of the insurance company, a capitalist farmer Wu Shaoxian, who rented 588 mu of land, could only have 11,760 yuan as compensation; but if the compensation is calculated according to the standard proposed by scale farmers, he would get 41,160 yuan. After the insurance company rejected their demand, scale farmers, under the leadership of Wu Shaoxian, went to the Agricultural Committee of the F County and required it to settle the dispute. One of the scale farmers recalled: "The boss Wu united us and made an appeal to the government, since it is about our common interests" (Sha Yunkai). The F County Agricultural Committee sent officials to organize a negotiation meeting between scale farmers and the insurance company. Nevertheless, the two parties failed to reach an agreement, and the government officials could not persuade scale farmers to accept the compensation standard of the insurance company.

On the other hand, the head of the Agricultural Committee in P township indicated that considering the degree of the disease in 2013, the compensation standard

offered by the insurance company was reasonable. The head told me the reasons why scale farmers demanded high compensation:

When buying agricultural insurance, we registered an operational subject with a land area and rent amount. But those who bought agricultural insurance might not be the ones who were actually running the farm and cultivating the land. According to the insurance regulation, the one who bought insurance should get the benefits. But in here, some big households subcontracted land out to others. It was the big households that bought the agricultural insurance, and they got the compensation when grain was affected by disasters, not the ones who were actually cultivating grain. The big households did not do the farming, and they just signed a contract with others and subcontract to them the land, and they got the insurance compensation. I think this is not right.

As discussed in previous chapters, at the initial stage of land circulation, many scale farmers rented land and then further subcontracted the land to non-local tenant farmers. Since it was informal land circulation, it was scale farmers who signed formal land circulation contract, brought agricultural insurance and were listed as lessee in the related bank account, not non-local tenant farmers who actually cultivated land. Therefore, the scale farmers enjoyed all the government subsidies. Since scale farmers could benefit from the agricultural insurance compensation, some of them also engaged in the collective action to demand a higher level of compensation, even though they had already subcontracted land out to others.

Although officials from the county Agricultural Committee and P government intervened, they failed to settle the dispute. Some scale farmers even stated that if the local government could not handle the dispute, they would not continue to rent and cultivate land. In order to sustain the newly established formal land circulation market, officials from the county Agricultural Committee and P township government negotiated with the insurance company and persuaded the latter to accept scale farmers' demands. Eventually, the insurance company made a concession and agreed a compensation of 70 yuan per mu. One non-local subject informed me that the first layer of subcontractors, who were also scale farmers in P township, took the compensation, as he mentioned:

He (scale farmer) did not inform me and bought agricultural insurance privately. This year (2014), the insurance company gave 50 yuan per mu as a compensation. He got about 10,000 yuan for over 200 mu land. We had an agreement that I should get the compensation. But he did not tell me and I did not know when he bought the insurance. I bought the insurance at the first year. He saw the insurance could make some profits, so he bought the insurance at the second year and did not tell me. (Zheng Guifu)

Although this incident was not targeted at the local government, but scale farmers directly pressured the local government and pushed it to negotiate with the insurance company. These scale farmers came from different places, had different backgrounds, and even did not know each other. However, when it comes to their common interests, scale farmers rapidly organized themselves as an interest group which developed a clear understanding of their common interests. Thus, they not only demanded money and policy from the local government, they also pushed government officials to settle the dispute for them. That is why the head of the agricultural committee in P township started to complain about scale farmers, as he argued:

The policy demanded us to provide services to large-scale farmers. But how to serve them? Every large-scale farmer has different opinions and requirements. In the past, it was easy to provide services to the peasant households, and we just sent service from top to them. But nowadays, the government policy requires us to respect the wishes of large-scale farmers. So they have actively raised demands, and the government has to meet their demands. But one hundred large-scale farmers could raise one hundred demands. How is that possible for us to meet all of their demands? (Tao Pu)

The other example is about land circulation. G village was the first village which circulated its land in P township. The first round of land circulation in G village was completed ok February 2016. In order to improve the modernization of agriculture, the P government decided to invite a large-scale agricultural enterprise to invest and rent land. Thus, after rice was harvested in December 2015, the government informed scale farmers in G village not to sow seeds of winter wheat. However, scale farmers in G village argued that the P government had no right to do that since the land circulation contract did not expire until on 28 February 2016. According to the law, the P government indeed had no right to intervene in the business of scale farmers. In addition, one article in the land circulation contract stated: "Party B shall enjoy the priority under the same conditions." Hence, scale farmers indicated that since they offered the same land rent as the agriculture company, they should have the priority of renting the land. Therefore, scale farmers in H village who wanted to rent land organized a boycott action. In order to attract the investment of the large-scale agricultural company, the P government made concessions and paid 135 yuan per mu to scale farmers in He village as compensation. After they got the compensation, scale farmers agreed to the governments demand. This outcome is favorable for scale farmers. The first reason is that the land circulation contract will expire on 28 February, 2016 and it is impossible for scale farmers to cultivate and harvest wheat in that year. The second reason is that even though winter wheat could bring them income, it also has risks. Whereas, scale farmers now could get 135 yuan per mu income without any risks or investment. The fallout of the incident also benefited scale farmers. After the P government paid scale farmers to hand over usage of the land, the large-scale agricultural company did not rent land according to its contract with the local government. Therefore, from December 2015 to June 2016, the majority of land

in G village lay waste. The P government eventually rented the land to individual capitalists, and some of them were previous scale farmers.

Based on the two examples, we can see that scale farmers had developed a clear understanding about their interests, and they were consciously taking collective actions to fight for their interests. Scale farmers have become a "class-for-itself" with clear class consciousness, that is why they made an alliance and pressured the local government from below and collectively demanded money and policy. Although it was the local government which facilitated the emergence of scale farmers, with the development of their production scale and economic status, the local government could no longer fully control them anymore. Therefore, agricultural resources and policies became more favorable to scale farmers.

Summary

In this chapter, I have examined the struggles among several types of actors over four main resources, including land, labor, agricultural machinery services, agricultural product and subsidy and policies from the government. It has also explored the possibilities of the formation of new agrarian classes in the agricultural sector.

The first type of struggle is about access to the land. The struggle over land is mainly between middle peasants and local government, and peasant households and scale farmers. Middle peasants, who rented land through informal land circulation, refused to give up their interests and obstructed the local government from renting their land to others. The local government, to defend its interests, has taken various measures to protect the formal land circulation market. The two parties engaged in a "war of words", and both of them interpreted the other as selfish men who did not care about the welfare of others. In addition, middle peasants took advantage of their social relationships and rented land from their relatives, friends and neighbors. The informal land circulation activities challenged the formal land circulation market. As a response, the local government adopted strategies of "guiding" and "preventing" to stop the informal land circulation activities. In fact, it was a struggle between two patterns of land circulation, while middle peasants supported spontaneous land circulation among peasants, and the local government supported formal land circulation controlled by the government. Nevertheless, this conflict did not affect the circulation of land.

In a similar vein, the conflict between peasant households that rented their land out and scale farmers was not about land circulation, but about the amount of land rent. Therefore, I argued that the collective action organized by peasants in the SZ village group did not challenge the land circulation market in P township, but reinforced it. Peasants in P township did not want to break the current production relationship or return to the previous production relationship, and they could only choose to rent their land out. Thus, I conclude that land concentration will be a normality in P township, and agriculture capitalism will continue to develop. In this process, the amount of land rent and the length of land lease will be the outcome of the struggles between the two sets of actors.

The second is the struggles in the agricultural production process. The main actors were agricultural machine service providers and scale farmers, and agricultural workers and scale farmers. Although agricultural machine service providers and scale farmers from outside had conflicts at the beginning, they eventually established a cooperative relationship. It was because the two actors have shared interests: the former was the main provider of agricultural machine services, and the latter was the main buyer of agricultural machine services. The cooperative relationship was created not only due to the demand-supply relationship between them, but also because they have a similar level of bargaining power in the agricultural services market, since they depend on each other and one could not overwhelm the other. While in dealing with low-medium farmers and small-scale farmers who have a lower capacity for bargaining with them, agricultural service providers charged them higher fees.

In the production process on farms, the main conflicts were among agricultural workers and scale farmers. In order to accumulate more profits, scale farmers increased their exploitation of agricultural workers. However, agricultural workers were not passive and obedient subjects. They took resistance measures to defend their interests. There were three forms of resistances taken by agricultural workers in P township. The first one was the hidden form of resistance. Whereas, I found agricultural workers in P township seldom took this form of resistance since it conflicted with their rural logic of being an honest and decent person. The second form of resistance was exiting, which means agricultural workers refused to work for certain employers due to low wages and no welfare. Although this form of resistance was individualized, it could create a collective pressure to individual scale farmers and forced them to change their management practices. This was the most common form of resistance taken by agricultural workers in P township. The third form of resistance was organized collective actions. Although it was rare, it was the most influential form of resistance. There were agricultural workers' groups in the south part of P township. Although these groups were loosely organized, the agricultural workers successfully forced employers to pay them higher wages. As a counter measure, scale farmers employed fixed casual agricultural workers to pressure the worker groups, but the efficacy of this measure needs further investigation. With the establishment of capitalist production relations in agriculture, there will be more intensive conflicts between agricultural workers and employers.

The third form of resistance occurred in the grain trading sector between scale farmers and grain traders. While it appears that grain traders were in an advantageous position in the grain production chain, they had to compromise with scale farmers. Therefore, similar to the situation in the agricultural machine service market, the relationship between scale farmers and grain traders changed from confrontation to cooperation. However, for medium farmers and small-scale farmers who have a much lower economic status, they had no choice but to endure the exploitation from grain traders.

The fourth form of resistance was over agricultural subsidies and policies. The scale farmers were nurtured by the local government. However, with the development of their production scale and economic status, the local government could no longer fully control the scale farmers. On the other hand, scale farmers developed clear understandings about their interests, and took collective resistance measures to pursue their common interests, and pressure the local government to settle the agricultural insurance dispute and compensate their production losses. It is clear that large-scale farmers, based on their dominant role in the agricultural production system, could push the local government to grant them subsidies and favorable policies.

Based on the above discussion, it is reasonable to argue that capitalist farmers, petty-capitalist farmers, (mid- and upper) medium farmers and grain traders had already developed clear class consciousness. They developed firm understandings about their interests, and started to pursue their interests through struggles or cooperation. They could be defined as agricultural capitalists in a broad sense. On the other hand, although low-medium farmers and small-scale farmers started to fight for their interests and even organized collective actions, they did not have a clear class consciousness. Their class consciousness was still in an embryonic form, and they were in a process of struggle over class (Harriss-White and Gooput, 2000: 89). As to peasants who rented out their land, even though they took collective actions to fight for land rent, their actions were not led by clear consciousness, but by petty dissatisfactions. Therefore, they were still a "class-in-itself" at this stage.

Chapter 8: Conclusion

In the study of China's agrarian transition, some scholars regard the government administrative power (He, 2015a; Trappel,2016) or capital from beyond the countryside (Zhang, 2008; 2010) as the main driving force of the agrarian transition. However, I argue that these scholars apparently make an error of omission, that is, they only pay attention to the "external causes", and neglect the more important "internal cause".

Based on the previous studies, this dissertation brings the "peasant differentiation" perspective into the research on China's agrarian transition with two purposes: one is to avoid the error of external determinism; another is to combine the peasant differentiation as the "internal cause" together with the government administrative power and the capital beyond the countryside as the "external causes" to re-examine China's agrarian transition. In addition, with the introduction of a "class analysis" approach, the present study seeks to clarify the idea that the status and characteristics of China's agrarian transition, and the picture it presents, are actually the results of the interaction and mutual struggle between different actors in the agricultural economy. Under this analytical framework, this dissertation shows that China's agrarian transition has its own particularity, but which does not go beyond the universality of capitalistic development.

Based on the above understanding, this dissertation has revealed the status, nature and features of China's agrarian transition through answering the following four questions.

Who Are the Farmers?

"Who is the farmer?" – an easy but important question to understand the agrarian

transition has been ignored by China's "sannong" scholars. Although with different purposes, whether the "Agricultural Modernization School" who try to eliminate the small peasants, or the "Peasant Economy School" claiming to be on the side of peasants, both compress the Chinese peasants into a homogeneous group relative to urban residents under the urban-rural dual structure. Whether the "big households" who cultivate hundreds of thousands mu of land, or the "small farmers" who are just farming several mu of contracted land, both are incorporated into the concept of "farmer" without any distinction. This is in fact results from the lack of a "peasant differentiation" perspective.

Based on the peasant differentiation perspective, this study confirms that under the dual influences of state and market, the small peasants created by the decollectivization have experienced rapid differentiation. With the promotion of national power, commodity relations have expanded rapidly in rural China. China's peasant households have been incorporated into a national market in a three-part way. First, the commodification of daily life. After the decollectivization, education, health care and other basic means of livelihood previously provided by the state or communes now can only be obtained from the market with cash. The result is that the small peasants cannot sustain their lives without the market. Second, the commodification of agricultural production. In order to meet the increasing demand for money, China's small peasants began to enter into the market as the sellers of agricultural products. They expect to obtain money income from the agricultural products market. After the small peasants became involved in the commodity economy, they will be guided by the logic of the market to pursue maximum gains. In order to obtain a stable profit, small peasants usually adopt a quantity-driven market strategy to evade the fluctuation of market price. However, this market strategy requires small peasants to invest more in agricultural materials (seeds, fertilizers, farm chemicals, etc.) for production. In this sense, China's agricultural production has been completely commercialized. With the "the silent compulsion of economic relations", the

agriculture business of small peasants suffers from the "scissors difference" which is inevitably unprofitable, which makes the majority of small peasants become the losers in the competitive agricultural products market. To make a living, China's small peasants have to move out as migrant workers to earn wage income. This implies the third form of commodification – the commodification of labor. From now on, the small peasants appear on the market no longer as the sellers of agricultural products, but as the sellers of their own labor. To date, among China's peasantry, livelihood maintenance, farm production and the body as a labor have been commercialized and incorporated into a national market system.

With the large numbers of rural labor moved out, China's small peasants began to experience "deagrarianization". The result of the deagrarianization was a change in the survival mode of peasant households', that is, from the previous "subsistence plus" mode to "wage plus" mode. The agricultural income gradually no longer constitutes the major part of the family income of small peasants. The decline of the agricultural income proportion leads to the devaluation of farmland, not only the economic value, but also the social and cultural value. The devaluation of farmland also impacts peasant family agriculture, as some small peasants directly chose to abandon the land, and a lot of small peasants chose to transfer out their contracted land spontaneously. The spontaneous land circulation created a "middle peasants" group in rural areas. Although the emergence of "middle peasants" had some effects on peasant family farming, the mode of agricultural production of middle peasants was still confined to peasant family farming.

With the influences of state and market, China's small peasants have experienced a rapid deagrarianization process, and have already been gradually disintegrated and differentiated. Soon after this, along with the launch of the national land circulation movement, the small peasants have begun to experience the process of depeasantisation. The small peasants who originally occupied a dominant position in the agricultural production sector now have been differentiated into four types of new subjects of agriculture. The differentiation of small peasants actually represents the transformation of China's agricultural production mode, from the previous peasant mode of peasant family farming to the capitalist mode of agricultural production. This change process was jointly shaped by two capitalist dynamics – one is the capital flowing into the countryside from top to local, the other one is the peasant differentiation from bottom to top.

In this newly emerged capitalist agricultural production system, the capitalist farmers and petty-capitalist farmers hold a dominant position. The former are mainly the "capital beyond the countryside" capitalists, including industrial and commercial capital and agribusiness capital; the latter ones include the industrial and commercial capital and agricultural capital both local and non-local. As for the number, these two new types of farmer are the absolute minority; as for the total economy, however, they are the majority. They concentrate most of the land resources in their hands. The degree of capitalization of their farms is high. The production of these farmers is the essence of capitalism: the production of capitalist farmers is mainly dependent on hired wage laborers, while the production of petty-capitalist farmers mainly relies on family labor, they cannot function without some hired wage laborers. The main purpose of these two farmer types is to realize capital accumulation through expanded reproduction. Although known as "family farmers" or "new professional farmers", they virtually are not the "farmers" in the original sense, rather businessmen who "engaged in farming as a business" (Banaji, 2002: 115).

The medium farmers located in the middle position are differentiated from the previous "middle peasants" group. The daily operation of their farms mostly relies on family labor, and they only need to hire a small number of hired wage laborers in the busy season. The medium farmers can further be divided into three types. The small number of mid- and upper-medium farmers hold a certain amount of land and agricultural machines. After completing the simple reproduction, they

still can put a small portion of surplus capital into expanded reproduction. In order to gain more profit, they attach themselves to the capitalist farmers and pettycapitalist farmers who are the main buyers of the agricultural machine services. They hope they can be transformed into the former two types of farmers one day through gradual capital accumulation. On the contrary, the low-medium farmers can only just maintain their simple reproduction, while sometimes they still need to sell their labor for wages to support their livelihoods.

The small-scale farmers are in an attached position in the capitalist agricultural production system. They are a majority in numbers, but a minority in the total economy. They don't transfer out their contract land and can be seen as the direct successors of the small peasants. The management of their farms is totally reliant on their family laborers, so their production mode is still that of peasant family farming, but which has already become part of the whole capitalist agricultural production system. Obviously, the small plots of land they farm are insufficient to assist them to complete even simple reproduction, so they have to sell their labor for wages to support their households. In this sense, they own "dual identities": as agricultural producers, they are squeezed by the agricultural service providers and the grain traders; as agricultural workers, they are exploited by the capitalist farmers.

Similarly, although still called a "farmer", the low-medium farmers and smallscale farmers are not the "farmers" in the original sense, rather the "class of labor". They are the sellers of labor in the market, which is the structural role they played in the capitalist agricultural production system.

Bernstein (2010: 4) claimed that: "as a result of class formation there is no single 'class' of 'peasants' or 'family farmers' but rather differentiated classes of smallscale capitalist farmers, relatively successful petty commodity producers and wage labor". The above four types of new subjects of agriculture virtually are the new agrarian class differentiated from the original homogeneous small peasants. They are created along with the change of China's agricultural production mode and are the representation of the different types of agricultural production mode.

Who Owes the Land?

Since the 1950s, the collective land system has been established in rural China. In law, the owner of the rural land is the collective economic organization. Although in practice there still exists some ambiguous points (Ho, 2001), it is certain that the land is not privately owned in rural China. It is also in this sense that some scholars believe that China's collective land system can prevent the separation of peasant households and land. In contrast, this dissertation demonstrates that China's collective land system was already not the original one. The variation of the collective land system has already promoted the commercialization of the land. So, it cannot hinder the land being separated from peasant households, rather it accelerates the separation.

In fact, as early as the establishment of the Household Responsibility System, China's collective land system has changed from the genuine collective land system in the Mao era to the "new" collective land system in the reform era. The land property right has been divided into two parts: the land ownership, owned by the collective economic organization, and the land contract and management rights, enjoyed by the peasant households as collective members. This is the "Separation of Two Rights Relating to Farmland". This institutional innovation virtually makes the collective land system the basis of peasant family farming. Afterwards, the state has constantly strengthened and consolidated the Household Responsibility System. The 1993 No. 11 Policy Document proposed the principle of "more people but no more land, fewer people but no less land", which made the collective lose the right to redistribute the land, and stabilized the land contract and management rights of peasant households. It can be no exaggeration to say that the land ownership owned by collective economic organization has actually been emptied by the land contract and management rights of the peasant households.

The system designers have imagined that the Household Responsibility System could overcome the drawbacks of the peasant economy by virtue of the "unified and separated combined, two-tier management". However, the fact is that the "separation has been strengthened, while unification has not been established". Under this situation, the inherent drawbacks of the peasant economy soon emerged, which seriously impeded agricultural modernization. After about 20 years, the honeymoon of the state and the small peasants comes to an end. Since 2001, the state started to promote land circulation, intending to change the mode of China's agricultural production, and to facilitate the agricultural modernization through encouraging new subjects of agriculture. Compared to the beginning of Openingup, the reform of the rural collective land system after 2001 were mainly represented as "Separation of Three Rights Relating to Farmland", that is, the rights relating to farmland have been divided into three aspects: land ownership, land contract right and land management right. This institutional change, on the one hand, didn't change the collective land system and only shook the Household Responsibility System nominally; on the other hand, it effectively solves the issue of "land fragmentation in operational level" triggered by the Household Responsibility System. Nominally, the farmland is still owned by the collective economic organizations, and can only be contracted by the members of the collective economic organization, but now, the land management rights can be concentrated through land circulation. Although the farmland nominally can be combined with the peasant households even more tighter than before, because the land contract right has been strengthened at the legal level, the fact is that it can also be separated from the peasant households legally and much more easily. Different from the "Enclosure" in England, the land separated from the peasant households in today's rural China is mainly adopted by institutional reform and in

a non-violent way. The farmland in rural China virtually has been conditionally commercialized by the "Separation of Three Rights Relating to Farmland". In this sense, China's rural land relations have begun to change in an insidious way. Based on this argument, I suggest that the collective land system in contemporary China already cannot prevent the farmland from been separated from the peasant households, rather it has accelerated this separation process. Land circulation actually takes the farmland away from the peasant households in a redemptive way. By doing this, a commercialized land market has been established in rural China.

Borras (2012) claims that "whether or not the land can be acquired is not a purely technical issue, but a political one. Who can get that piece of land, at what price, in what ways and for what purposes? All of these are the specific topics related to politics." In theory, it seems that everyone has equal access to acquire land from the land market. In practice, however, it is only the industrial and commercial capital, agribusiness capital and individuals with a strong economic background that can acquire the land due to the large land transfer fees required. Besides, the local government also strongly supports land transfer for its own considerations. These capitals and individuals who acquired land then are transformed into capitalist farmers and petty-capitalist farmers. Although they are the land tenants, they are actually the "supertenants" who have many more advantages than the peasant households who are the land lessors.

How Capital is Accumulated in the Agricultural Sector?

The purpose of the class of capital to transfer land is to make a profit and accumulate productive capital. But such capitalism does not develop smoothly in the agricultural sector as in the industrial sector. Due to limitations of some natural and social factors, the establishment of the capitalist mode of production in the agricultural sector actually is an iterative and gradual process. But even if capital temporarily quits the agricultural production link, it still can earn a profit and realize capital accumulation through a non-capitalist approach. When failed the first time, the scale farmers in P town subcontracted the land to non-local tenant farmers and still earned a subcontracting fee as well as government subsidies.

From the non-local tenant farmers, the scale farmers learned about suitable planting structures and the practice of moderate scale management. Up to this point, the barriers to entering into agricultural production have been surmounted. Now, the capital can earn a guaranteed and steady profit from agricultural production. Once capital gains a firm foothold in the agricultural production chain, it will not just be satisfied with a stable income, but will begin to find various ways to gain more benefits. This dissertation suggests that the capital usually adopts diversified strategies to accumulate capital in the following three sectors. It can be said that capitalist doesn't care about what specific approaches to adopt, as long as it can be conducive to more accumulation.

First, accumulation from production. Specifically, there are three strategies adopted by the capitalist The first one is the diversification of product/planting structure, including the diversification of grain crops, the planting of cash crops and the production of green and organic products. Due to the limited land area and tenancy term, how to gain a maximum value from the land is the question that capitalists take into account. The diversification of grain crops cannot increase the output value of the land, but can reduce production costs. So, it is a relative approach. While the planting of cash crops and the production of green and organic products can increase the output value of land, which is an absolute approach. The second tactic is around labor supervision, which is an approach usually adopted in the industrial sector. The labor supervision can further be divided into three types: 1) "Hard supervision". This way intends to link the work effectiveness and labor quality to the individual agricultural worker through the regionalized management and labor, quality inspection and material motivation, which mainly expects to

solve the issue of "focus on quantity over quality". 2) "Participatory supervision". This way refers to the way farmers (mainly the petty-capitalist farmers) personally get involved in daily agricultural production and play the role of "supervisor", which mainly intends to deal with the issue of "show up for the work but contribute non-labor". 3) "Soft supervision". In addition to the previous two ways, the capitalist can also utilize the social norms, such as "favor", "face" and "being a good human", to realize the self-supervision of the agricultural workers. If this type of supervision can be achieved, then its effect will definitely be better than the previous two types. Through a comprehensive application of these three labor supervision strategies, the capitalist can extract surplus value from the agricultural workers at the most extent. The third one is to improve the farm mechanization and chemicalization, and adopt new agricultural techniques. This strategy is actually an attempt to make the agricultural sector much more "industrialized". Through the improvement of mechanization, the farmers, on the one hand, expect to reduce the agricultural workers needed on the farm and decrease the labor cost, and on the other hand, to extract more surplus value from the agricultural workers. The chemicalization and adoption of new agricultural techniques would make the production process much easier to be controlled by capitalists, and further remove the barriers for capital accumulation. In short, capitalists can adopt these three strategies jointly or solely according to their own character, and aim to make the labor real subsumption under capital.

Second, accumulation from circulation. Bernstein (2010:65) stated: "By 'agriculture' or the 'agricultural sector' in modern capitalist economics, I mean farming together with those economic interests and their specialized institutions and activities, 'upstream' and 'downstream' of farming, that affects the activities and reproduction of farmers." In this study, the "upstream" of farming includes the buying and selling of agricultural inputs and the agricultural machine services, while the "downstream" of farming refers to the grain trade. Taking one "dragonhead" enterprise, the Red Star rice company, as an example, this dissertation

describes the "vertical integration" strategies adopted by agribusiness capital. In order to avoid the risks in farming, agribusiness capital transfers out the production link purposely after it has firmly controlled the upstream and downstream conditions of farming. Even so, the agribusiness capital can still farther squeeze the profit from the production link through the "scissors difference" approach. Certainly, this method – control the upstream and downstream and transfer out the production link – can only be applied to the medium farmers and small-scale farmers, but not to the capitalist farmers and petty-capitalist farmers with relatively strong economic means. Under the "vertical integration" strategy, the medium farmers and small-scale farmers have been incorporated into the capitalist agricultural production system and transformed into the "shadow workers" of agribusiness capital. In this case, the labor is formally subsumed under capital. For some agricultural machine services providers and scale farmers with relatively strong economic means, they are not unsatisfied with the profit from one link of the grain industrial chain. The agricultural machine services providers try to get involved in the agricultural production link through land circulation. The scale farmers set foot in the upstream of farming to reduce production costs and increase profit. All in all, the capital urgently expects to integrate the grain industrial chain to expand the ways and means of capital accumulation.

Third, accumulation from projects. In addition to the previous means, the capitalist can also employ non-economic means to accumulate capital from state agricultural projects. This strategy can only be undertaken by a small number of "dragon-head" enterprises and industrial and commercial capital. The essence of this strategy is to establish a cooperative relationship with the local government. To be specific, the capital assists the local government to make some "political achievements" and typically, while the local government steers state agricultural projects to the capital. It is through these collaborative relations that large capital can acquire a huge amount of government subsidies from various projects. This is also why so much industrial and commercial capital in urban areas and agribusiness capital is keen on land circulation in contemporary rural China. The profit from such projects is so huge that this strategy has become the main approach for the large capitalists to realize their accumulation.

With the penetration of capitalism, China's agricultural production mode itself has experienced a transformation, from peasant family farming to an agriculture with capitalist characteristics. The different accumulation strategies in different fields have shown that capitalism has already smoothly developed in the agricultural sector. On the one hand, the scale farmers expelled other farmers and held a dominant position in the capitalist agricultural production system; on the other hand, capitalists can realize their accumulation in a full range of options in the agricultural sector. The capitalist mode of agricultural production has diminished the mode of peasant family farming. China's agricultural production itself has been capitalized.

Agrarian Struggles and Class Formation

The struggles around four main resources including land, labor, agricultural service and agricultural products, once again confirms the assertion that China's peasant economy has experienced disintegration and collapse, and its dominant position has been replaced by a form of capitalist agricultural production. A key part of the agrarian transition is the redistribution of the interests in the agricultural sector. However, the final picture of the interest distribution is not a top-down design by the state, but an outcome of the struggle and compromise between different actors. During this process, these actors are increasingly differentiated into two clear groups.

One is an alliance of interests composed of capitalist farmers, petty-capitalist farmers, mid – and upper – medium farmers, and grain traders. This alliance of

interests dominates the capitalist agricultural production system. As the large-scale farmers, the capitalist farmers and petty-capitalist farmers, on the one hand, they require the mid – and upper – medium farmers to provide them with agricultural machinery services; on the other hand, they need the grain traders to buy their large amounts of grain. As the providers of the agricultural machine service, the mid – and upper – medium farmers to purchase their services, otherwise, their expensive agricultural machines will be left underutilized, and they themselves will suffer a loss. The grain traders naturally need the scale grain producers to sell them large amounts of raw grain, which can help them to occupy a position in the capitalist agricultural production system. Although there were furious struggles among these three actors in the initial stage, they soon realized their common interest. With their own capital, they occupy the leading position in grain production, agricultural machine services, and grain trading on the grain industrial chain respectively. Further, they divide up the profit on the chain according to their own economic strengths.

Although these three actors cooperate with each other in general due to their common interest, there are some conflicts among them also due to their respective interests. Either with cooperation or in conflict, however, both represents that these three actors have a clear understanding of their own interest and have the consciousness to actively safeguard it. In this regard, I argue that the scale farmers, mid - and upper - medium farmers, and grain traders own a relatively clear class consciousness and are becoming the "class for itself". From the united action of raising the price of the agricultural machine service, the action of depressing the price of the grain, to the united action of the scale farmers "asking for money and policies" from the local government, an image of a class actor has already become visible. They are the different types of capitalists on the grain industrial chain, whose common interest is built on the exploitation and extraction of the other group.

Another group is composed of low-medium farmers, small-scale farmers, as well as the peasant households transferring out land. The reason for putting these three actors together is not their common interest, but their common experience of being exploited and squeezed by the former group. In short, they are located at a subordinate position in the capitalist agricultural production system. Due to the changing family survival mode, many peasant households have already moved away from agricultural production and continually transfer out their contract land. I have shown, in chapter 2 and 3, that the peasant households are at a clear disadvantage during the land circulation process. Although the low-medium farmers and small-scale farmers still own some means of production, they cannot complete family reproduction only relying on their small plots of land due to the "simple reproduction squeeze" (Bernstein, 1977: 64-65), so they have to sell their labor to earn a living. In this case, the low-medium farmers and small-scale farmers have been subjected to the "double exploitation": as agricultural producers, they have to bear higher prices of agricultural inputs and agricultural machine services, and accept lower grain prices from grain traders; as labor sellers, they have to accept increasingly lower wages under increasingly higher labor demands for productivity gains in order to get the few job opportunities.

However, these actors are not passive subjects, they also take a variety of strategies to work against the exploitation of the former group. The land rent is the only issue that can make the peasant households united together to struggle. They indeed have carried out a successful collective action with class color. But this collective action does not mean that the peasant households are already a "class for itself" with a clear class consciousness. I have showed that their collective action is mainly due to their discontent with the violation of commonly accepted practice – that someone who rents the land has the obligation to pay a full land rent. In addition, the object of their discontent is only one specific scale farmer, but not all scale farmers in P town. They are not yet aware of their own disadvantage position in the land circulation market so they didn't take this chance to make a change, but

reinforced this market through transferring land once again. Such peasant households actually are just a "class in itself".

The low-medium farmers and small-scale farmers as agricultural workers are increasingly aware of the conflicts of interest between themselves and the scale farmers and grain traders. However, this awareness is still affected by rural logic. Therefore, on the one hand, they occasionally express their own wage demands through organized collective resistance under the influence of the class consciousness debris; while on the other hand, they more often take the individualized and passive form of resistance - exit - to express their dissatisfaction with the influence of rural logic. While in the trading relationship with grain traders, the low-medium farmers and small-scale farmers, as agricultural producers, still do not choose to struggle, but to endure the squeeze of the grain traders, even in a no way out situation. Clearly, the low-medium farmers and small-scale farmers as the class of labor are still do not have a clear class consciousness. Instead of forming a united class consciousness, the class of labor has run into an internal segmentation situation due to the influence of a variety of social differences, such as regional disparity, gender, and so on. Even so, they have been clearly pushed along the road from "class in itself" to "class for itself" due to their structural position in the capitalist agricultural production system; they are in a process of struggle over class. I cannot predict the speed of this change process, but what is certain is that this process will be filled with thorny issues and dangers.

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