

Analysis on the Resources Flow Relationship Between the New Agricultural Management Main Body and the Ordinary Peasant Household: Taking Hubei Province as an Example

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Abstract: A new agricultural management main body fostered is an important step in solving the problem, “who will farm in the future”. As a major grain producing area, Hubei Province plays the key role in ensuring food security. We analyse land resource and labour resource flow relationship between a new agricultural management main body and an ordinary peasant household. The results show that the number of migrant workers working in Hubei Province increases year by year in recent years, which is mainly ascribed to the number of agricultural workers who are engaged in primary industry in the province increases. In the slack season of farming, women and the elderly do part-time jobs in local large-scale production whose seasonal demands of employment are met. Migrant workers are sources of primary labour of new agricultural management main body, and women and the elderly are secondary labour. The land area of scale management is less than a quarter of the area of contracted land of farmers. The scattered smallholder production mode dominates. Labour productivity is low. Thus, we put forward a few policy proposes, such as properly solving the trouble of migrant workers back at home, the use of “Internet+” in the development of new agricultural management main body, regulating procedure of land transfer and enhancing the contracts management.

Keywords: Hubei Province, New Agricultural Management Main Body, Peasant Household, Resources Flow, Land Circulation

1. Introduction

In 2008, the Chinese Communist Party 17 Third Session decided to promote land circulation and realise farmland management in proper scale. It encourages places where conditions permit developing professional investors, family farms, farmers’ cooperatives and other professional main-scale operation. In 2012, the report of the 18th National Congress of the Communist Party of China explicitly proposed cultivating new agricultural management main body. In 2013, the No. 1 document in Central Committee

pointed out creating a better environment for cooperative management, professional investor and family farm in legislation and supporting them through reward and supplement policy [1]. On 31 May 2017, General Office of the Communist Party of China and that of the State Council issued *suggestion on quickly building a policy system to cultivate new agricultural management main body*, which put forward that generally forming a steady growth mechanism of investment and a mechanism of policy execution and performance evaluation by 2020, which meets the demands of the rules of WTO and complies with the growth of national finance in order to establish the policy support

system with perfect framework, precise measures and effective mechanism and continuously improve capacities of new agricultural management main body adapting to the market and driving peasant's income increase [2]. Thus, new agricultural management main body has aroused people widespread attention. Political circles began to reform and better institutional systems that are adverse to growth and development of new agricultural management main body. Academic circles mainly clarify the concept and meaning of new agricultural management main body, and focus on resources flow relationship between new agricultural management main body and ordinary peasant household.

Firstly, about the concept of new agricultural management main body, academic circles define it from two dimensions: (i) emphasizing scaled and commercialized degree of their management. Compared with traditional semi self-sufficient family management, new agricultural management main body tends to adapt to modern commercialized development that shows competitive characteristics of pursuit of scale management and output benefit [3]. Kong put forward that new agricultural management main body is an economic organization formed through land circulation and being directly engaged in agricultural production or operation, mainly concluding professional investors, family farms, farmer cooperatives and agricultural enterprise [4]. (ii) emphasizing the enterprise management methods of new agricultural management main body. New agricultural management main body values establishing new agricultural management system and developing modern characteristic agriculture, and depends on high levels of management and technological equipment to reach the goals of large-scale operation and high land productivity [3]. Zhang and Zhao proposed that new agricultural management main body was an agricultural management organization whose major objective was commercial production, which had a large scale, well techniques and facilities, and good management ability. Thus, labour productivity, resource utilization rate and land productivity are high [5].

Secondly, about resources flow relationship between new agricultural management main body and ordinary peasant household, academic circles have given greater emphasis to land resource flows. Surveying on rural villages in Gambia, Beck and Bjerge found that poor households are more likely to receive seasonal land usage rights. They also showed that these exchanges were more likely to occur in villages where land was abundant and where ethnic fractionalization was low [6]. Alamirew *et al.* has researched the effect of leasing out land to foreign investors on local residents in Oromia Region, Ethiopia. Findings indicated that foreign land deals increase the odds of households falling into food insecurity and that the employment opportunities are both temporal and marginal. They proposed that future endeavours should resort to substantial changes in the principles of investment as well as the design and enforcement of contracts on land transfers so that international investors could commit to objectives beyond private profit [7]. Employing a Social Accounting Matrix (SAM) based partial equilibrium model, Cloete *et al.*

analysed the impact of land transfers in the North West Province South African. Results from the model revealed that the negative impact of the land reform policy largely overshadows the positive effects. Moreover, transfers within the larger agricultural sub-sectors would result in more significant social and economic impacts [8]. Valente focused on the South African land reform programme that had been widely criticised for its slow pace as well as its apparent lack of contribution to poverty reduction. She found that, on average, beneficiaries did not gain from participation, and suggested that the main reason for the disappointing impact of participation was the incompatibility of consultant-led land use plans to land grantees' skills [9]. In China, policy of right confirmation of agricultural land [10] and education level of farmer [11] have significant positive effect on land circulation, and rural social security lagging has the opposite effect. The probability of land circulation of the household whose ratio of elderly labour is high is obviously low. The probability of land circulation of the household whose ratio of young or middle-aged labour is high increases remarkably, while the former tends to lease on the land and the later tends to rent the land. Elderly labour does not transfer land since land bears the weight of function of social security [12].

Few scholars study capital and labour resources flow between new agricultural management main body and ordinary peasant household. Taking Yichang City, Hubei Province as an example, Lin & Qi analysed land resources flow relationship between new agricultural management main body and ordinary peasant household, which was promoted by rural labour outflow. They found that with the number of rural labour engaged in household's farming decreasing slowly, the number of primary production labour showed decreasing trend in Yichang City, and farmers' cooperative and family farm were being developed speedily. Increasingly wasted cultivation decreased actual sown areas and land circulation made land resources flow to new agricultural management main body. In the context of urbanization, rural labour flowed to urban quickly and peasant household became the supplier of land [13].

Different from the existing research [13], taking Hubei Province as an example, this paper studies both land and labour resources flow relationships between new agricultural management main body and ordinary peasant household. As a major grain producing area of China, Hubei Province plays an important role in ensuring food security. It conducts unprecedented experiments with new agricultural management main body cultivation, which leads the way and has accumulated valuable experience. The representative experiences include Wuhan mode of family farm intensive development, Huafeng mode of farmer professional cooperative driving, Fuwa mode of leading enterprise driving, Double Harvest mode of social services driving and Shayang mode written in China's central one document twice. Due to the demonstration effect of innovative typical agricultural management main body, many planting-breeding or agro-tourism comprehensive family farms, compound farmer cooperatives and leading enterprises specializing in

producing, processing, sales and service continue to spring up. New agricultural management main body cultivation is an important measure for solving the problem, who farms in the future, thus, this research has great realistic significance.

2. Economic Development Status in Rural Areas of Hubei Province

Hubei Province locates in central China and the middle stretch of the Yangtze, whose entire landmass is 185.9 thousand square kilometers. In late 2016, it has about 58.85 million inhabitants, among them, 24.66 million rural dwellers [14]. The cultivated area is 3.436 million ha, including paddy field 2.010 million ha accounting for 58.5% of the cultivated area. The aquiculture area in reservoir is 103.7 thousand ha, and that in lake is 187.3 thousand ha, totaling 291.1 thousand ha [15]. Hubei Province is situated at north and south intermediate belt. It belongs to subtropical monsoon climate with ample sunshine, abundant in rainfall, rain in hot season and clear four seasons. There are many kinds of plants and animals that are suitable for farming on it, which is the most important production base of grain, cotton, oil, pig, and the largest freshwater products production base in China.

Hubei Province fully utilises natural resources so that agricultural economy has experienced rapid development. Overall, the positive growth of the agricultural economic indicators assumes an overwhelming trend during 2007-2016 (Table 1 & Figure 1). In the period, grain yield has grown for nine years in a row. However, the extraordinary floods in the summer of 2016 throughout the province resulted in negative

growth. Cotton yield showed positive growth in very few years and negative growth in most years. The main reason is that the sown area decreases (Figure 2). Because cotton planting industry is a labour-intensive industry, agricultural labour force suddenly decreases in the context of a large number of rural labour transfer, and cotton farmers' labour costs rise. In addition, the prices of production factors and agricultural production materials and the use-cost of agricultural infrastructure raise too much, such as land, pesticide, chemical fertilizer and irrigation, while the cotton sale price falls because of the government abandoning the subsidy of cotton price and fierce international competition. The decrease profits of cotton planting makes sown area decline. Except negative growth in both 2010 and 2016 because of disaster, the oil crops yield shows positive growth in other years. The number of pigs for sale was positive growth during 2007-2014, while it was negative growth in both 2015 and 2016, which is because the pork prices had been low for a long time at an early stage. Pig farmers' enthusiasm in production was frustrated that led to pig bred decrease. Through reproducible sows washed out largely and retail investors stopping breeding in both 2013 and 2014, the situation of insufficient production capacity of pigs occurred in both 2015 and 2016. Output of aquatic products remains positive growth in the last decade. Per capita disposable income of rural residents increased year by year, which maintains a double-digit growth in most years, whose growth rate is larger than urban residents'. The main reason is that the starting point of income of rural residents is low, and the most important is that the government rich peasant policy effects appears so that the path of increase income of peasants is wide.

Table 1. Hubei Province rural economy development status during 2007-2016.

Year	Grain		Cotton		Oil	
	Output (billion kg)	Growth rate (%)	Output (million kg)	Growth rate (%)	Output (billion kg)	Growth rate (%)
2007	22.9	3.5	453	1.0	2.82	0.7
2008	22.2	1.9	513	-7.9	2.84	11.3
2009	23.1	3.7	481	-6.4	3.14	9.9
2010	23.2	0.3	472	-1.8	3.12	-0.7
2011	23.9	3.1	526	11.5	3.03	2.8
2012	24.4	2.2	532	1.1	3.20	4.9
2013	25.0	2.4	460	-15.7	3.33	4.2
2014	25.8	3.3	360	-21.8	3.42	2.6
2015	27.0	4.6	279	-22.4	3.45	1.0
2016	25.5	-5.5	189	-36.7	3.30	-2.9

Table 1. Continued.

Year	Pig for sale		Aquatic product		Per capita disposable income	
	Number (million)	Growth rate (%)	Output (billion kg)	Growth rate (%)	Annual income (thousand yuan RMB) [#]	Growth rate (%)
2007	37.9	10.8	3.71	11.9	4.00	16.9
2008	35.0	11.7	3.13	5.2	4.66	16.5
2009	37.4	6.8	3.38	7.9	5.04	8.1
2010	38.3	2.5	3.53	5.7	5.83	15.8
2011	38.7	1.1	3.65	3.4	6.90	18.3
2012	41.8	8.0	3.89	9.2	7.85	13.8
2013	43.6	4.2	4.10	5.5	8.87	12.9
2014	44.8	2.7	4.33	5.6	10.8	11.9
2015	43.6	-2.5	4.56	5.2	11.8	9.2
2016	42.2	-3.2	4.71	3.3	12.7	7.4

Data sources: Hubei Province national economy and social development statistical bulletin during 2008-2016.

Notes: [#]Per capita disposable income is calculated at comparable prices.

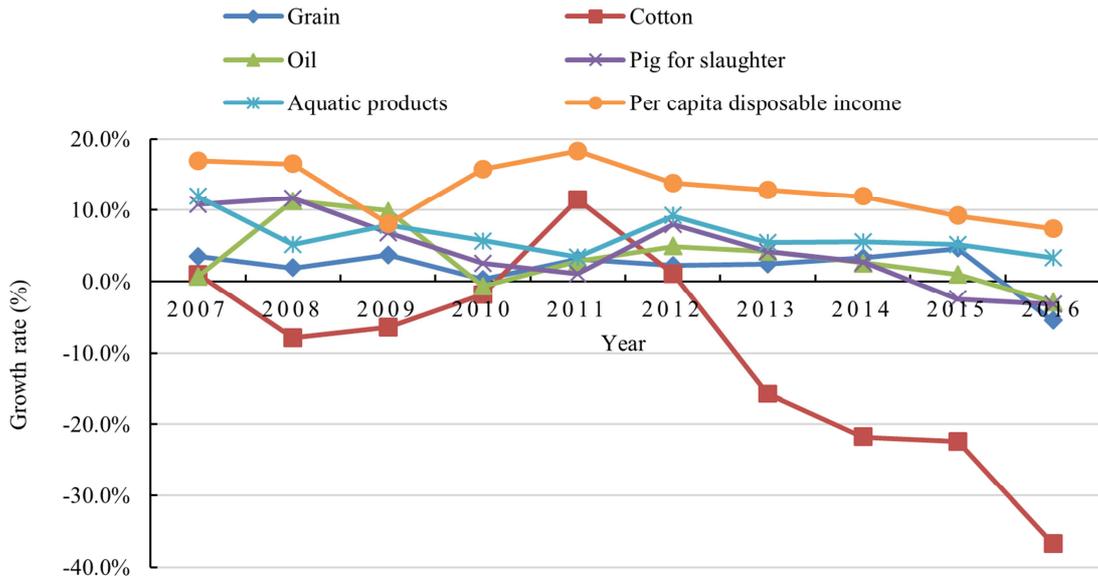


Figure 1. Growth rate of Hubei Province rural economic indices during 2007-2016.

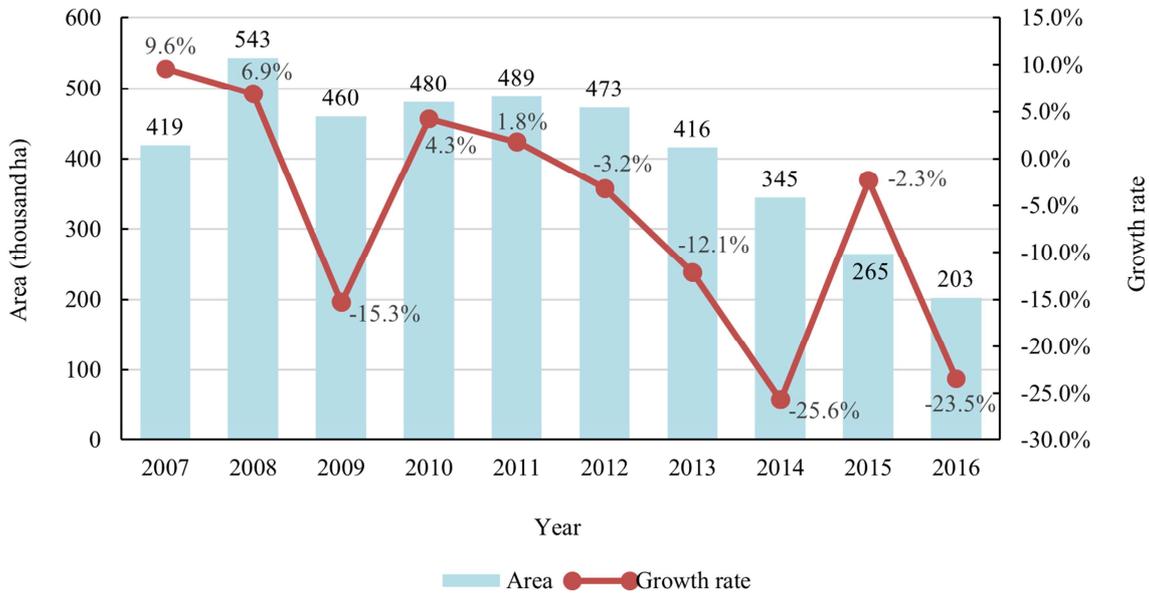


Figure 2. Hubei Province cotton growing area and growth rate during 2007-2016.

3. Current Situation of Hubei Province New Agricultural Management Main Body

Following the generating of household contracted responsibility system, new agricultural management main body is a product of agricultural production division continuously deepening [16]. Hubei Province has adjusted three agricultural subsidies policy since 2016, who puts 20% of capital stock of general subsidies, subsidy of big grain production household and increment of three agricultural subsidies into supporting new grain management main body being engaged in agriculture land proper scale management [17]. The effect of new agricultural management main body development increasing farmers' income is evident. In 2016,

annual per capital income of family farm employees rose to more than RMB 50 thousand yuan, and compared with non-members' income, farmers' cooperative members' income was increased by 20% [18]. By the end of September 2017, the number of Hubei Province new agricultural management main body has been more than 220 thousand persons, the system has cultivated new skilled farmers above 100 thousand persons [19], and the area of scaled land management has been up to 1.79 million ha [18].

3.1. Farmers' Cooperative

By the end of March 2017, the number of Hubei Province farmers' cooperative registered at Industry and Commerce Administrative Department has been up to 73.8 thousand, an increase of 21% against the end of 2015. More than 45% farmer households have joined farmers' cooperatives. More

than 80% counties and cities have established united cooperation of cooperatives of farmers, totaling 285 united cooperation organisations. According to the industry and service category registered by the farmers' cooperatives, Hubei Province plantation cooperatives accounts for 44.3% of the total, breeding ones 34.2%, marketing ones 6.7%, technical service ones 6.1%, materials purchasing ones 4.4%, processing service ones 1.1%, transport service 0.6%, storage ones 0.3% and others 2.3% (Figure 3). Hubei Province has established demonstration cooperatives at all levels more than 6 thousand, in which 332 demonstration cooperatives are at national level, 1.1 thousand ones at provincial level and 2.8 thousand ones at municipal level. The demonstration effect of the demonstration cooperatives is given full play [20].

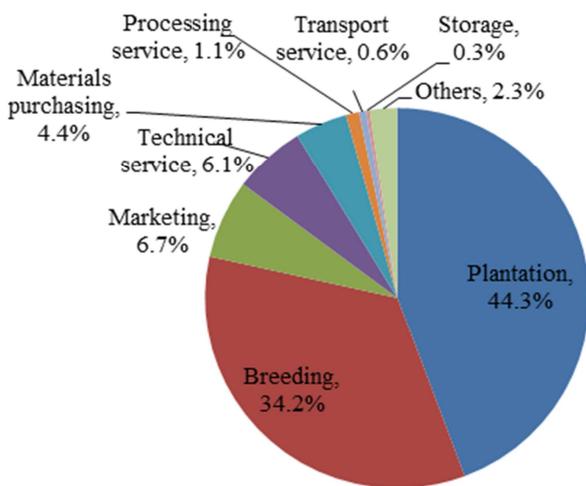


Figure 3. Rate of industry and service categories of cooperatives of farmers.

3.2. Family Farm

In 2009, Wuhan, Hubei Province began to experimentally construct family farms, becoming the national leader of family farm development together with Songjiang, Shanghai City and Ningbo, Zhejiang province, whose experience is known as Wuhan Mode. In recent years, Hubei Province family farms show a quick development trend. By the end of 2016, family farms have been up to 52.4 thousand, in which 25.6 thousand registered at Industry and Commerce Administrative Department, an increase of 28.6%. The operating area of family farm is 1.13 million ha, accounting for 16.8% of the provincial total land circulation area. Family farms being mainly engaged in plantation account for about 45%, in which food production ones account for 43% [21]. For Hubei Province family farms, the average operating area is 13.3 ha, average number of labours is 3 persons, and most of them have two or three seasonal employees, basically meeting the needs of scale management. Family farms being engaged in grain production with scale management about 13.3 ha account for above 70%.

Source of family farmers shows pluralistic structure feature (Figure 4). Home-going entrepreneurs form the backbone of family farmers, accounting for about 40.0%,

who have an acute sense of the market and are aggressive enough. About 20.1% of family farmers come from experienced big specialized households of crop and animal production. About 19.8% of family farmers are from members of cooperative of farmers with high degree of organization, who are familiar with market. About 10.2% are innovative vocational school and college graduates whose cultural level is high. About 9.9% are driven by leading companies, who have advantages of capital, technology and human resources support. Hubei Province family farms mainly include seven modes of production and management: (1) intensive plantation mode, for which grain is intensively produced on a large scale; (2) cropping and breeding mixed mode, which is a combination of cropping and breeding, diversifying operation; (3) ecological cycle mode, which reflects the green and coordinated development idea; (4) quality control mode, which sets up brand and seeks development by quality; (5) recreation and sightseeing mode, which realises integrated development of agriculture and tourism; (6) technical innovation mode, which pays attention to new technology, new species and new pattern, with high technological content of production; and (7) "internet+" mode, which uses internet to gather market information, adjust production structure and expand sales channels. Overall, the economic benefit of Hubei Province family farms is generally great, whose employees' average annual income (>50 thousand yuan RMB/person) is more than local peasant households' and migrant workers' (30 thousand-50 thousand yuan RMB/person) [19].

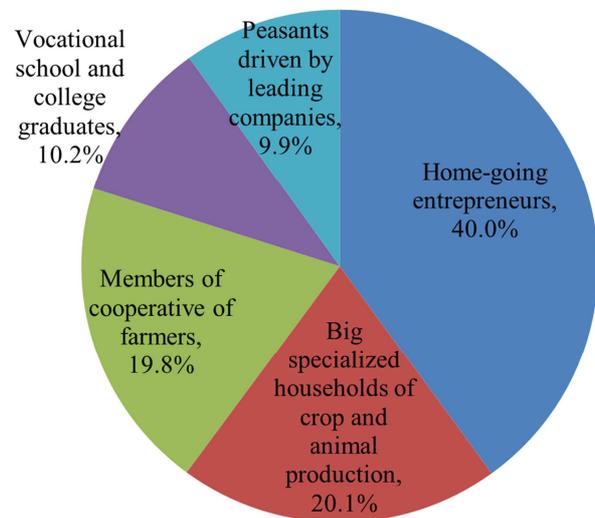


Figure 4. Family farmers' composition.

4. Resources Flow Relationship Analysis

Initially, the household contract responsibility system certainly mobilized the production enthusiasm of farmers, boosting rural vitality. However, as the technology develops, it leads to problems of land fragmentation and low labour productivity, which become more and more obvious. Peasants' income is too low to maintain family reproduction, which makes rural male youths leave the countryside for employment,

secondary labour left behind in rural areas. Wasteland is a widespread view. As a supplement to agricultural production, new agricultural management main body transfers in farmland at lower cost, which takes full advantage of modern agricultural science and technology achievement in development and follows the road of intensification and mechanization of agricultural production resources.

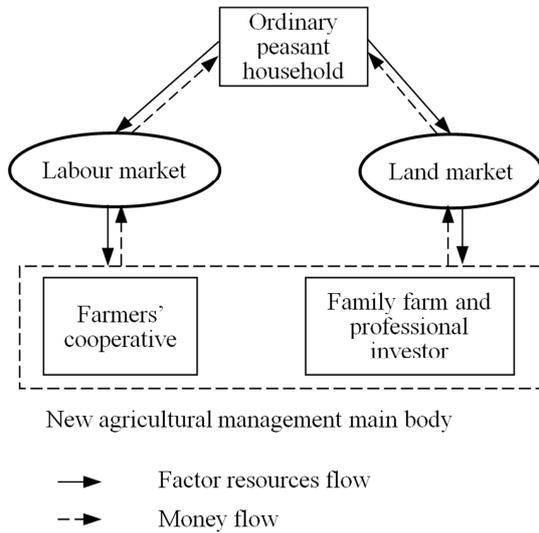


Figure 5. Resources flow between new agricultural management main body and peasant household.

Due to the survival and family reproduction pressures, the produce mode of a single isolated household was unsustainable. On the one hand, through rural-urban labour markets, peasant household transfers out most high-quality labour, which is

called rural-urban migration of agricultural labour. On the other hand, through rural labour and land markets, transfer all or part underemployed agricultural labour and spare capacity of land, which is called local transfer of production factors. This research analyses the later, i.e., the resources flow between ordinary peasant household and new agricultural management main body, including farmers' cooperative, family farm and professional investor (Figure 5). Labour and land factors flow to new agricultural management main body, and factor income, i.e., agricultural worker's wage and land rent flows to ordinary peasant household. Thus, agricultural resources internal circulation flow improves the efficiency of agricultural production because of economies of scale, increases farmer's income because of full employment of unused resources, and insures the national food safety, which is the self-realized system and mechanism innovation in the agriculture modernization process.

4.1. Labour Resources Flow Relationship

The average cultivated land area run by Hubei Province peasant households has increased during 2007-2016 (Figure 6). However, the overall level is low, only 0.47 ha per household, which shows that small-scale peasant economy dominates for Hubei Province agricultural production pattern. Not only family economic contribution function but also social stability function and employment security function depend on land, which solidifies small cultivated area per household to some extent. Labour productivity is so low that agricultural income can't maintain family reproduction. Thus, primary labour has to go out to work to obtain income.

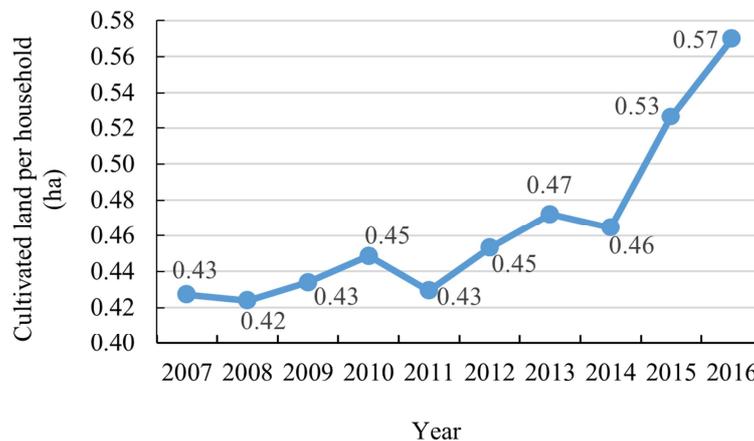


Figure 6. Hubei Province rural cultivated land per household during 2007-2016.

For nearly 10 years, the number of Hubei Province rural migrant workers being engaged in primary industry is basically rising (Table 2), increasing from 480.2 thousand persons in 2007 to 662.5 thousand persons in 2016, an increase of 37.96%. The ratio of migrant workers being engaged in primary industry rose to 5.91% in 2016 from 5.14% in 2007, in which the ratio was low for the first three years, while it was high for the last seven years (Figure 7). The number of migrant working in other provinces remained about the same, average 6.08 million

persons, while that of migrant working in Hubei Province showed a progressively increase, rising to 4.99 million persons from initial 3.52 million persons, an increase of 41.6%. The main reason for the number of migrant working in the Province is the number of migrant being engaged in primary industry increase, which rose to 294.6 thousand persons in 2016 from 180.9 thousand persons in 2007, an increase of 62.9%. These primary industry agricultural workers in the province are the major labour composition of new agricultural management main

body, who are in their prime of life and have experience with agricultural production and management, playing roles of technical personnel and skilled manager in scale operation of professional cooperative, family farm and professional investor.

Table 2. The employment figures of Hubei Province migrant working in different industries and destinations during 2007-2016.

Year	Number of workers in primary industry (thousand persons)	Number of workers in secondary industry (million persons)	Number of workers in tertiary industry (million persons)	Ratio of primary industry workers (%)
2007	480.2	5.410	3.457	5.14
2008	500.7	5.443	3.672	5.21
2009	480.9	5.433	3.807	4.95
2010	609.9	5.501	3.986	6.04
2011	602.4	5.752	4.099	5.76
2012	617.4	6.020	4.126	5.74
2013	607.1	6.045	4.374	5.51
2014	619.0	6.155	4.437	5.52
2015	643.1	6.022	4.522	5.75
2016	662.5	5.923	4.630	5.91

Table 2. Continued.

Year	Number of workers in other provinces (million persons)	Number of workers in the province (million persons)	Number of workers of primary industry in other provinces (thousand persons)	Number of workers of primary industry in the province (thousand persons)
2007	6.015	3.521	309.0	180.9
2008	6.003	3.579	312.6	186.3
2009	5.826	3.873	288.2	191.6
2010	5.897	4.175	356.2	252.2
2011	6.005	4.416	346.1	254.5
2012	6.190	4.528	355.1	259.7
2013	6.311	4.665	347.5	256.9
2014	6.276	4.868	346.5	268.8
2015	6.247	4.873	359.1	280.2
2016	6.002	4.987	354.6	294.6

Data sources: Hubei Province rural statistical yearbooks during 2008-2016 and Hubei Province statistics office website

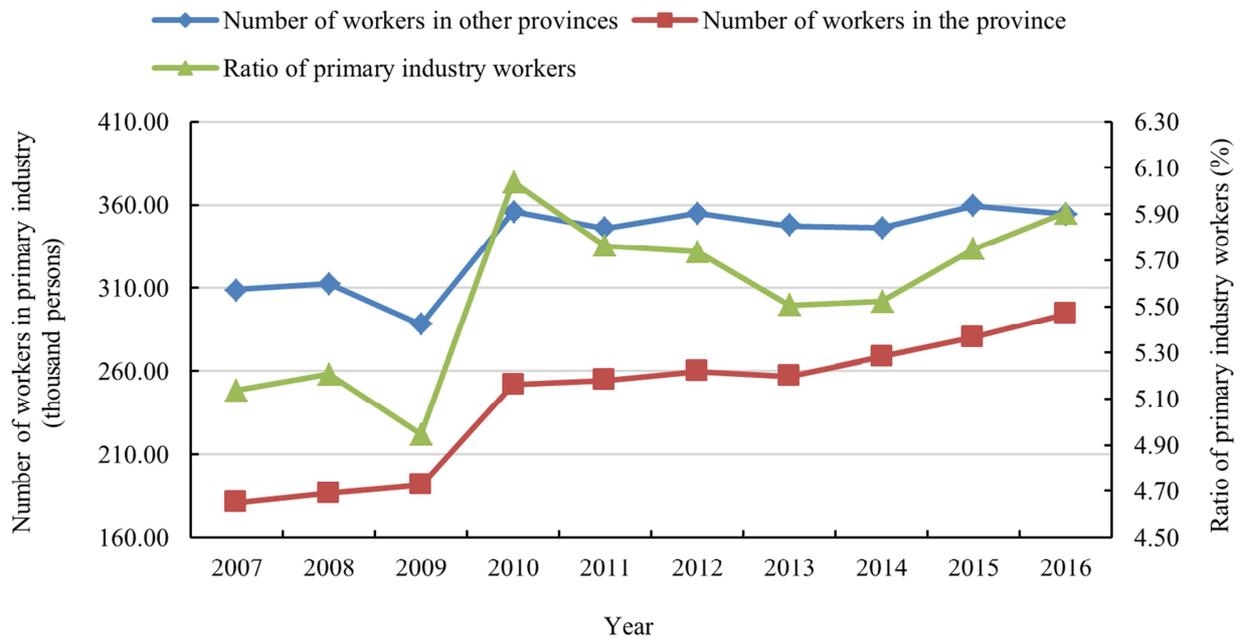


Figure 7. Number and ratio of Hubei Province migrant workers in primary industry during 2007-2016.

Besides the middle-aged labour comprises major force, a part of secondary labour is an indispensable reserve and pool for Hubei Province new agricultural management main body organizing agricultural production, which includes women who farm at home throughout the year and old people. On the

one hand, women have to remain in rural areas to watch their kids and disabled elders, or they undertake family main agricultural production because they have no specific skills to work outside. They often do part-time jobs in nearby family farm, specialized household and agricultural enterprise in the

slack season of farming. Due to the scale managers planting different crops or being engaged in cultivation, busy farming seasons are staggered. According to our survey, there are about 78.2% of rural women temporarily employed by new agricultural management main body in Hubei Province. On the other hand, due to rural higher standards of living and better sanitation at present, most the elderly in their 60s and 70s are healthy. More importantly, they have maintained a tradition of hardworking, for whom working is a lifestyle habit. They share responsibility for family agricultural production along with women. They are also employed by new agricultural management main body in the slack season of farming. The ratio of the elderly doing part-time jobs nearby is up to 56.6%.

4.2. Land Resources Flow Relationship

Land fragmentation has raised the farming cost for a long time. Through institutional innovation, Hubei Province overcomes agricultural development obstacles. For example, Shayang Mode mentioned in Central Document No. 1 two years in a row has solved the problem well. According to the principle of voluntariness, Shayang County farmers realise each peasant household contiguous cultivation through exchange and consolidation of land in village so as to draw cooperatives transfer land, which decreases production cost RMB 4.5 thousand yuan per ha. The registration of land eliminates farmers worrying about land circulation to a large extent. Hubei Province has basically finished registration and certification of rural land contracted management right by September 2017. The transfer area of family contracted land is 1.19 million ha, accounting for 39.5% of total [22], in which the area of scale management is 692.0 thousand ha, accounting for 22.9% of total. Area of socialized service such as land trust and instead of cultivation is up to 1.10 million

ha, accounting for 36.4% of farmers’ contracted land area [18]. In the meantime, Hubei Province government departments at all levels positively build efficient platforms for ordered land transfer between new agricultural management main bodies and ordinary peasant households. By March 2015, Hubei Province already has 62 county-level platforms of land transfer service, 1.02 thousand town-level ones which cover more than 90% of subdistrict office of towns, and 16.66 thousand village-level ones (Figure 8) [23].

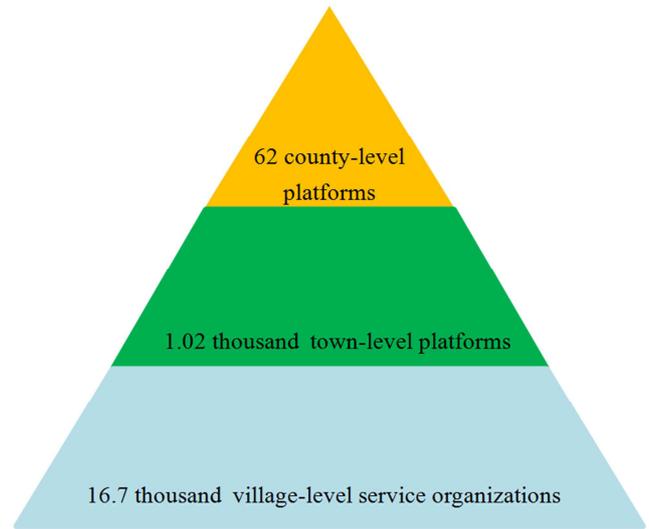


Figure 8. Hubei Province land transfer service organizations at all levels.

Hubei Province land transfer keeps a rapid growth. The ratio of transfer area to total cultivated area during 2007-2016 see Figure 9, which rises from 2.6% in 2007 to 38.2% in 2016 [24]. The ratio is up to 39.5% in June 2017, higher than the national average.

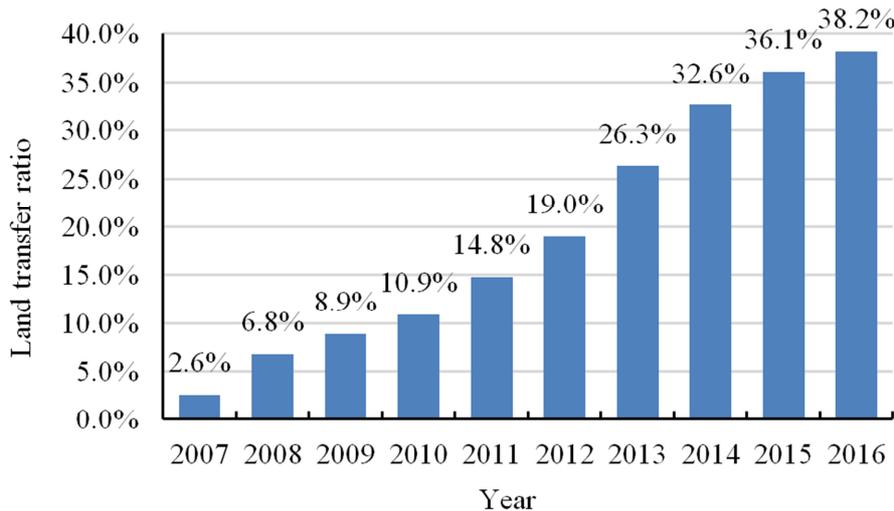
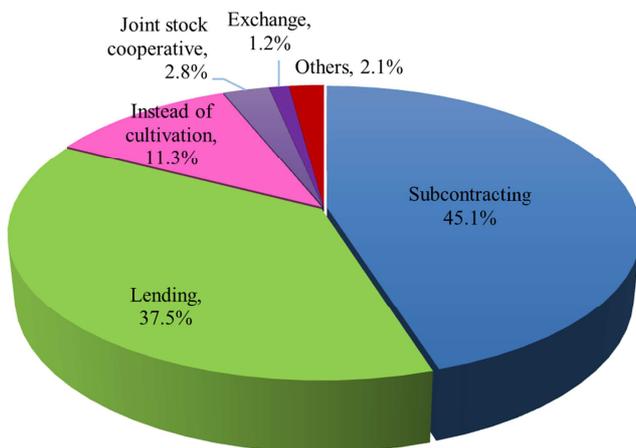


Figure 9. The ratio of Hubei Province land transfer during 2007-2016.

In 2016, Hubei Province land transfer patterns are subcontracting, lending and instead of cultivation based, accounting for 45.1%, 37.5% and 11.3% of total, respectively (Figure 10). The ratio of joint stock cooperative, exchange,

etc. is small. According to the actual situation, all parts of the province actively explore land management modes compatible with local development characteristics [25], to sum up, mainly including four modes: (1) professional

investors operation mode, which is the basic pattern of scale management in Hubei Province. Professional investors obtain land operation right by land circulation. Besides operation themselves, some professional investors hire or sublet land to planting proficient to operate. The mode advances the process of agricultural mechanisation and standardisation, improving production efficiency of grain and oil. For example, the big farming households, Baoxin Xiao in Suixian [26] and Haizhou Yu in Xiangyang [27], are representatives. (2) professional cooperatives operation mode, which is based on land concentration operation. Enclosing leading industry and characteristic industry, professional cooperatives organize peasant households who join the cooperative. Professional cooperatives uniformly arrange and deploy planting and breeding species, agricultural materials delivery, technical service and product distribution. Each peasant household operates alone. The scale management of cooperatives service and peasant household production decreases production cost and improves organizational degree of agricultural production. For example, Linjun Tea Cooperative in Changyang, Yuyue Lobster Breeding Cooperative [28] and Yaoji Evergreen Nursery Cooperative in Shayang [29] are typical representatives. (3) land stock cooperative mode. Peasant households build land stock cooperative and buy a share priced by contractual right of land in accordance with principles of peasants' volunteerism, land pooling, intensive farming, promised lowest return and sharing profits according to contribution. For example, Chunhui Pattern in Xiaonan is a representative [30]. (4) agriculture-related enterprise mode. Leading enterprises write contracts for purchase and marketing with peasant households who adopt the order form production. Hefeng mode in Anlu is a typical representative [30].



Data sources: Hubei Province statistical bureau.

Figure 10. Hubei Province land circulation patterns and the ratios in 2016.

5. Main Conclusions and Implications

The analysis of the resources flow relationship between the new agricultural management main body and the ordinary peasant household finds that Hubei Province agricultural production to some extent realises appropriately scaled

operations, and at some extent, achieve the national goals of rural modernization, mechanization and scale operation, meeting the requirements made by government to the major grain producing area of China. However, the province doesn't completely realise agricultural modernization. There is a great distance from a moderately prosperous society. To sum up, the conclusions and the policy implications can be reached as the following:

Firstly, the number of Hubei Province rural migrant labour being engaged in primary industry is on the rise in 10 years. The number of migrant workers in other provinces basically remains unchanged, while that in the province rises each year that is due to an increase of agricultural workers in primary industry in the province, who are the important labour sources of new agricultural management main bodies. To ensure agricultural workers, the stable labour force, it is necessary to solve the problems of medical treatment, retired life, children education, care of family older people, etc. The government has a lot of work to do for agricultural workers, such as increase the rate of reimbursement of new rural cooperative medical system while a peasant goes to a doctor in other places, completing rural elderly security system and enhancing the propaganda of rural policy and legislation, promoting urban high-quality educational resources flowing to rural so as to achieve the equalization of rural and urban education sources, reducing and eliminating the differences between urban and rural social resources of care for the aged and the related services covering rural communities.

Secondly, women farming at home all year round and the elderly are indispensable secondary labour for new agricultural management main bodies. Due to new agricultural management main bodies planting different crops or being engaged in breeding, women and the elderly do part-time jobs in nearby scale production such as local cooperatives, family farms and professional investors during the slack seasons of farming, meeting the needs of seasonal employment. To realise agricultural labour full employment, such as women and the elderly surplus labour transfer during the slack seasons of farming, and new agricultural management main bodies hiring seasonal workers at lower cost, local government should actively build labour market platform through internet and apply "Internet +" to supporting the development of new agricultural management main bodies, promoting the process of agricultural informationization development.

Thirdly, the ratio of Hubei Province family contracted land transfer is up to 39.5%, while scale management area only accounts for 22.9% of family contracted land area, more than three quarters farm land still adopts the mode of scattered smallholder production. Both labour productivity and agricultural yield are too low to maintain family reproduction that results rural primary labour migrant working and farm land lying waste or extensively operated, which wastes formerly scarce arable land sources. To boost the income of farmers, it is necessary to speed up the process of rural land transfer and agricultural scale management. On the basis of regular management, it is high time to put into practice of

reports of the 19th National Congress of the Communist Party of China about contracted land right prolonged thirty years after the second round becoming due. On the one hand, the procedure of land transfer should be regulated. A regular contract of land transfer should be signed, practising a registration system. The contracts should be checked, certificated and registered by rural land contracted administrative organization. On the other hand, management of land transfer contracts should be strengthened. Rural land contracted administrative organization should provide a unified and standardized land transfer contract text for farmers, arrange specialists administering contracts files and make a good job of filing, archiving and consulting [25].

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