

The Logic of Chinese Farmer's Citizenization

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Abstract: Farmers' citizenization concerns three logical aspects. First, farmers' viability determines whether they can truly be citizenized and whether they can realize scale management of rural land. Second, farmers' viability also determines the time for the realization of scale management of rural land and subsequently determines the coming of the Lewis turning point and commercialization point. Third, the key to viability's coming into play lies in the government's institutional supply. Citizenization is in step with the long process of scale management of farmland, the coming of the Lewis turning point and commercialization point, the eventual eradication of the impact of the household registration system, and the development of professional farmers. Farmers' viability is the ultimate key to such synchronized challenges. There are two approaches to the enhancement of farmers' viability. The first is "to invest in farmers" and the second is to alleviate the existing household registration system's constraints on farmers. The first approach outweighs the second, for its quintessential essence is to increase farmers' per capita capital, enhance their viability and transform China from a country with vast human resources into a country with quality human resources.

Keywords: citizenization; viability; scale of farmland management; the Lewis turning point and commercialization point; household registration system (*hukou*)

1. Introduction

In China, since the reform and opening up, some farmers have been engaged in urban non-agricultural industries. Because of the dual household registration system, these farmers, although living in urban areas, have been excluded from the urban household registration system. Their social security, medical security and their children's education rights are different from "real" urban residents. Therefore, these farmers cannot be integrated into the urban culture and lifestyle and they cannot be

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called real urban residents. But, this situation is gradually being solved and the process is referred to as the citizenization of Chinese farmers.

On 9 January 1958, the *hukou* registration system (household registration system) was signed into law and China began to restrict the flow of the rural population into urban areas, which created a two-fold system of rural and urban areas. Under this system, each citizen was classified in an agricultural or non-agricultural *hukou* (rural or urban). This system is linked to social welfare such as residency, medical, education and pension and farmers who live in cities without urban *hukou* status were not qualified to receive the benefits of urban welfare.

China's household registration system is a system that strictly classifies urban and rural populations, and which embodies an urban priority in resource distributions. China's household registration system originated from the development strategy of giving priority to heavy industry as the means to stimulate economic growth. The household registration system has caused some negative side effects such as the unbalanced development of urban and rural areas, the split of urban and rural markets and the consistently expanding income gap between urban and rural areas, all of which have been harmful to the healthy development of the Chinese economy. China acknowledged this situation in 2004 and has since promoted the granting of urban residency to people who have moved from rural areas to cities and the cities have begun to reduce the requirements for urban household registration.

According to the report to the 19th CPC National Congress, the five years since the 18th CPC National Congress have seen an annual increase of 1.2% in the urbanization rate, with over 80 million people from the agricultural population being converted to urban residents. Yet, of these 80 million emerging urban residents, only a small proportion are now permanent urban residents. At the end of 2016, the proportion of permanent urban residents in China reached 57.35%, including 41.20% registered residents and 16.15% yet-to-be registered residents.^① It is difficult to determine whether such a result should be attributed to the difficulty for farmers to register their residences in urban areas or their reluctance to exchange their registered rural residency for an urban one. What was unquestionable is the fact that the proportion of registered urban residents was over 10 percentage points lower than that of total urban residents. In 2017 the population of China's rural migrant workers reached 287,000,000, threatening even tougher prospects.^②

The issue of Chinese citizenization is the outcome of the times. As agricultural efficiency increases, productivity improves. Given the large rural population base, however, the per capita land share among Chinese farmers is very much limited. If farmers are firmly bound to their land there will be an increasing surplus labor force in rural China making it even harder to increase farmers' incomes. As many farmers have swarmed to cities for work since China launched "Reform and Opening-up," the issue of citizenization had become more important. Farmers have been motivated to move to urban areas for higher pay, creating problems for the cities such as their social security, medical security and their children's education rights.

The theoretical system of new structural economics unveils the internal link and logic among "factor endowment, comparative advantage, development strategy, enterprises' viability, institutional structure and

① National Bureau of Statistics of the People's Republic of China. 2016 Report on the Monitoring and Survey of the Chinese Migrant Workers.

② National Bureau of Statistics of the People's Republic of China. 2017 Report on the Monitoring and Survey of the Chinese Migrant Workers.

development performance.”^① This paper have borrowed the term “viability” from new structural economics to interpret rural migrant workers’ development and citizenization in urban China.

Household farmland area, which is determined by productivity, determines the number of surplus rural laborers that will become migrant workers in urban areas and thus citizenized. Per household farmland area is just the productivity frontier that Chinese farmers can achieve, and it is this productivity that determines the scale of surplus laborers, and these surplus laborers are the migrant workers who determine the scale of citizenization which subsequently determines the duration of citizenization. The larger the per household farmland area is, the higher productivity frontier the Chinese farmers can achieve; the more challenging the citizenization task is, the longer it will last. Only when migrant farmers acquire viability for city life, can they truly be citizenized, the transfer of surplus rural laborers to urban China be smooth, and the scale management of farmland be advanced. Thus, migrant farmers’ viability for city life determines whether they can be citizenized and whether scale management of farmland can be realized. This is the first logical aspect.

Only when scale management of farmland is realized can farmers enjoy higher pay, can the rural-urban revenue gap be narrowed, can professional farmers gradually emerge as the main force of agricultural production, and can the Lewis turning point and commercialization point^② successively come to pass. Thus, viability determines the realization of scale management of farmland, which subsequently determines the convergence of rural and urban incomes and the coming of the Lewis turning point and commercialization point. This is the second logical aspect.

The above-mentioned two aspects do not concern the role of government. How does the government play its role in this citizenization? How is viability related to the government? One of the government’s functions is to satisfy society’s policy and institutional needs with corresponding supplies. This indicates that farmers cannot acquire viability without government support. Support which is given in two approaches. The first is to invest in farmers^③ and increase farmers’ per capita capital^④ to help secure viability. The second is to alleviate or even eliminate the negative constraint of the existing household registration system on citizenization. The purpose of eliminating the negative impact of the long-lasting rural-urban dual household registration structure is, of course, to enhance farmers’ viability. Farmers’ acquisition of viability relies heavily on government support. Only when corresponding institutional supplies are provided can farmers’ need for viability be satisfied and their real viability be enhanced. With government support, farmers can acquire viability, which brings this argument back to the first logical aspect.

2. Literature review

Given that the rural-urban dual household registration system is unique to China, overseas studies in this regard only focus on labor mobility-related issues, without paying much attention to citizenization. Among these studies, the most representative one is the classic theory of dualistic economy,^⑤ which was based on

① Lin et al., 2012, p. 3.

② Fei & Ranis, 1961.

③ Schultz, 2006, p. 150.

④ Solow, 1956.

⑤ Lewis, 1954.

Lewis' dual-sector model,^① and was later enriched and improved by other scholars.^②

By contrast, Chinese scholars attach more importance to rural-urban migration, i.e. citizenization, apart from the classic theory of dualistic economy and pure population mobility. Their studies mainly target the remaining issues caused by the previously implemented urban-rural dual household registration system. It is fair to say that this unique Chinese system impaired the stimulus of population migration.^③ This system generates repulsive interactions through two approaches. The first is the *1958 Household Registration Law of the PRC*, which shaped rural population's negative expectations of their citizenization. The second is established urban residents' negative attitude toward rural-urban migration, which was expressed by means of votes and complaints. The two approaches were combined to impair the stimulus of population migration.

In addition to "land-tied" issues, the Chinese household registration system has also brought about a series of other challenges to citizenization, such as high property prices, poor living conditions^④ and their children's limited access to schooling.^⑤ These existing problems have hampered the development of farmers' viability in varied degrees.

There are abundant papers and research data on citizenization. Without exception they focus on how to enable citizenization in a more convenient way, while paying scant attention to the core role of farmers' viability during the process of citizenization.

3. Farmers' viability and citizenization

Whether farmers can be successfully citizenized depends primarily on their viability. Suppose without any subsidy from the government for citizenization, Chinese farmers can still find a job in cities, purchase houses, settle down, and transform from low-end part-time workers to professional industrial workers; subsequently, they no longer rely on rural land for survival; instead, they can transfer their "three land rights" (ownership, contracting right and management right), along with a package of rural homestead-related rights, to others and become permanent urban residents. The satisfaction of the assumed conditions means farmers already have the capability to live and develop in cities. They have developed corresponding viability. Farmers with viability do not need any government subsidy or favorable policy for citizenization. Only when farmers are capable of citizenizing themselves can citizenization be sustainable. All relevant work should revolve around how to enhance migrant workers' viability in cities.

Yet, there are prerequisites for farmers with such viability to be successfully citizenized. First, non-agricultural industries should be developed well enough to absorb the population shifted from agricultural. Take the USA as a counter-example. In the actual process of labor mobility, however, for a time the natural growth in rural-urban migration was beyond the in-take capacity of local urban industries in low-income agriculture-dominated regions of the USA^⑥. As a result, such low-income agriculture-dominated regions

① Lewis, 1954.

② Jorgenson, 1967; Todaro, 1969; Fei & Ranis, 1975.

③ Li, 2003.

④ Chen, 2004.

⑤ Xu, 2008; Gao, 2013.

⑥ Bachmura, 1959

could not reach the average productivity level of US agriculture and therefore could not realize income convergence.^① Thus it can be seen, citizenization cannot be achieved unless corresponding prerequisites are satisfied.

Second, there is no twisted government policy hindering citizenization, for which farmers can step by step complete the division of labor according to their comparative advantages. Regarding this, China used to implement a rigid household registration system, which restricted farmers (including those not good at agricultural work) to their rural hometown. Yet, they were not allowed to go to cities for non-agricultural work, let alone to become permanent urban residents.

4. Viability, citizenization and scale management of farmland

Why do farmers migrate from rural China to urban China for permanent urban residency? It is imperative to carry out a thought experiment for a clearer picture of citizenization. How could Robinson Crusoe be citizenized when he lived alone on a deserted island? Was there any need for him to be citizenized? He did not need it; nor could he be. Given that there was no one but Crusoe on the deserted island, he must shoulder a range of tasks (grain production, garment making, etc.) and barely had time to think about anything else. He was a farmer in the first place. Likewise, before the food supply was sufficient for all, agriculture production remained a top priority. Judging from this thought experiment, citizenization is the outcome of the division of labor, while the division of labor in turn promotes citizenization.

There is no possibility for a 100% citizenization rate. Eventually, urban expansion is determined by two primary factors. One is a continuous decrease in the surplus labor force; the other is the relative price increase of agricultural products. Inflexible land supply in the agricultural sector can eventually hinder urban development by means of food prices and actual income decreases. The ultimate citizenization rate is determined by the scale of rural-urban labor transfers, which is determined by the optimal farmland scale of agricultural management. The maximum scale of manageable farmland determines the population of the rural labor force to be migrated to cities. The larger the manageable farmland is, the bigger the number of the rural laboring population that will be migrated to cities. The stronger farmers' viability grows, the faster the labor migration becomes, the earlier citizenization is completed, and the sooner the scale management of farmland is realized. Thus, citizenization is in full accord with the scale management of farmland. When citizenization is completed, the scale management of farmland should also be realized. The key to the success of such tasks lies in farmers' viability. The determinants of farmland scale are shown in the following formula.

$$\text{farmsize} = \frac{\text{laborproductivity}^{\text{②}}}{\text{landproductivity}} \quad (1)$$

Farmland scale is determined by labor productivity / land productivity ratio (specific value). If labor productivity is improved while land productivity is given, the management scale of farmland should be on the rise. This paper assumes that the denominator (land productivity) is given, while the numerator (labor

① Bachmura, 1959

② Eastwood, Lipton & Newell, 2010, pp. 3323–3397.

productivity) is increasing.^①

Ni Guohua and Cai Fang (2015) studied the scale of land management needed by farmers and even drew a decision-making atlas concerning the scale of agricultural management,^② according to which, the concentration of landholding is sure to be a long process. This analysis is based on the research results of that decision-making atlas. Admittedly, no direct connection has been found between family management and the scale of farmland management. However, family management, benefiting from strong ties among family members, does not incur monitoring costs, for which their transaction expenses^③ can drop to an ideal level. Given that, this paper studies agricultural management in the unit of rural household.

Based on the variation of data concerning agricultural labor and rural labor,^④ this paper roughly estimates the duration of citizenization and realization of scale farmland management. See Table 1.

Table 1 Rural Labor Force vs. Agricultural Labor Force

Year	Rural & urban employee caliber		
	Rural labor force	Agricultural labor force	Agricultural labor proportion %
1978	30638	28318	92.42770416
1982	33867	30853	91.10048129
1986	37990	31254	82.26901816
1988	40067	32197	80.35790052
1990	47708	38914	81.56703278
1991	48026	39098	81.41006955
1992	48291	38699	80.13708559
1993	48546	37680	77.61710543
1994	48802	36628	75.05430105
1995	49025	35530	72.47322794
1996	49028	34820	71.02064127
1997	49039	34840	71.0454944
1998	49021	35177	71.75904204
1999	48982	35768	73.02274305
2000	48934	36043	73.65635346
2001	48674	36399	74.78119735
2002	48121	36640	76.14139357
2003	47506	36204	76.20932093
2004	46971	34830	74.15213642
2005	46258	33442	72.29452203
2006	45348	31941	70.43530034
2007	44368	30731	69.26388388

① Land productivity may also be on a gradual rise during the process of citizenization. For example, farmers may be equipped with biotechnology and installation agriculture technology, which help increase per unit output of farmland. If so, the scale management of farmland will decrease accordingly; so will the quantity of the labor force and the pressure of citizenization. In that case, citizenization will be achieved sooner than expected. To avoid logical contradictions, this paper assumes that only productivity should be improved.

② Ni & Cai, 2015, p. 169.

③ Coase, 1960.

④ Data source: China Statistical Yearbook-2017 (including data as of the end of 2016).

Year	Rural & urban employee caliber		
	Rural labor force	Agricultural labor force	Agricultural labor proportion %
2008	43461	29923	68.85023354
2009	42506	28890	67.96687526
2010	41418	27931	67.4368632
2011	40506	26594	65.65447094
2012	39602	25773	65.08004646
2013	38737	24171	62.39770762
2014	37943	22790	60.06377988
2015	37041	21919	59.17496828
2016	36175	21496	59.45183505

Data source: *China Statistical Yearbook–2017*

Data source notes: The first, second and third lines were retrieved from *China Statistical Yearbook–2017*. The first column exhibits the consecutive years from 1990 to 2016; the second column exhibits the corresponding rural labor force (not necessarily engaged in agricultural production); the third column exhibits the agricultural labor force (i.e. labor force totally engaged in agricultural production); the fourth column exhibits the proportion of the agricultural labor force to the rural labor force. A linear estimation is made based on the changes in the proportion of the agricultural labor force to the rural labor force and from this estimation an ideal agricultural population is calculated.^① This is the calculation method of this part. The calculation of farmland area should be based on China's "red line" of arable land, i.e. 1.8 billion *mu* (c. 296.5265 million acres) arable land minimum.

By the end of 2016, China's agricultural population was 215 million people. Given the 1.8 billion *mu* of arable land, suppose there are three laborers per rural household,^② to reach the target of a 30 *mu* farm per household,^③ there is only a needed population of 180 million agricultural laborers, which means an excess of 35 million laborers that can be transferred. If taking the rural laboring population of 2016 as the base,^④ the proportion of the agricultural labor force after the labor transfer should be 49.8%, of which 16.3% more needs to be transferred from agricultural production to other sectors to fulfill the target of a 30 *mu* farm per household.

As shown in Table 3, a simple moving average is adopted to predict the change in proportion of the agricultural population. More specifically, by figuring out the average reduction rate of the agricultural population proportion over the 26-year time span from 1990 to 2016, this paper obtains the needed time for the reduction of the agricultural population proportion to 49.8%.

This 26 year period (1990–2016) saw the proportion of the agricultural population reduced by 22.1%, an annual reduction of 0.85%. That means it will take 19.2 years from 2016 to have the proportion of the agricultural population reduced by 16.3% by 2035. Thus, the target of a 30 *mu* farm per rural household will not be achieved until 2035.

① This is not to say the population transferred from agricultural production to other sectors were all citizenized. Instead, it means those transferred were no longer engaged in agricultural production. They might not become permanent urban residents, yet they were no longer "farmers" in essence, either. After all, professionally speaking, people not engaged in agricultural production cannot be regarded as farmers.

② Generally speaking, the agricultural cycle consists of a busy season and a slack season. A typical rural household has two laborers, i.e. husband and wife. During busy season, however, they may hire a temporary worker, giving rise to employment-based agricultural management. Under such circumstances, there are three laborers in a rural household.

③ This is based on the research findings of Ni Guohua, et al. (2015) on the decision-making atlas concerning the scale of agricultural management.

④ The calculation is based on China's rural population in 2016. Judging from historical data, the rural labor population has been on the decline; however, the introduction of the two-child policy blurs the variation trend of the rural labor population, for which this paper assumes the rural agricultural population is given and unchanged.

How long will it take to achieve the target of a 200 *mu* farm per rural household? Again, suppose the rural household has three laborers; this target means a 67 *mu* per capita farm, a needed agricultural population of 26,900,000, and a surplus agricultural population of 185,000,000 to be transferred elsewhere. Again, taking the 2016 population of the rural labor force as the base,^① and assuming fertility and mortality remain unchanged, the 30 million agricultural population accounts for 7.44% of the total labor force, which means 52.01% of the existing rural labor force will need to be transferred elsewhere. If the annual transferred proportion is 0.85%, it will take 61 years to complete transferring the abovementioned 52.01% of the existing agricultural population. It can be expected that 60 years after 2016, i.e. by 2078,^② the target of a 200 *mu* per household farmland area will be achieved.

Citizenization synchronizes with the promotion of agricultural scale management. The maximum manageable farmland determines the rural laboring population to be migrated to cities. The larger the manageable farmland area is, the greater the number of rural laborers that will need to be migrated to the cities. The key to the success of such tasks lies in the farmers' viability. Without viability, none of the abovementioned targets can be smoothly achieved. With sufficient viability, farmers can realize scale management and complete citizenization ahead of schedule.

5. Viability, citizenization and the Lewis turning point

It will be about half a century before rural China can realize a per household farmland of 200 *mu* which means there will be half a century-long journey of citizenization before approaching the commercialization point.^③ During this period of transition, part-time rural households will become an inevitable form of existence. Such a large proportion of part-time rural households indicate various challenges, including sharp contradiction between man and land, migrant workers' insufficient urban viability, the underdevelopment of urban sectors, and the invisibility of the Lewis turning point and commercialization point.

The part-time rural household model is not one developed after the coming of the Lewis turning point, or one continuing to exist when reaching the commercialization point, or one extensively adopted by developed countries. Even so, the part-time rural household model is an inevitable choice for China during its urbanization. Chinese rural households have to undergo a transition from traditional rural households, through part-time rural households, to professional rural households. During citizenization, the part-time rural household will be the primary model, while after citizenization, the professional rural household will dominate rural China. Professional rural households will be fully engaged in efficient modern agriculture. These rural households thus become professional farmers. These professional farmers are not stimulated to join in the tide of citizenization. In this sense, citizenization is a process of eliminating farmers not suitable for agricultural production and a process featuring a rational flow of factor resources. Rural China will no longer be a place

① The calculation is based on China's rural population in 2016. Judging from historical data, rural labor population is on the decline; however, the introduction of the two-child policy blurs the variation trend of the rural labor population, for which this paper assumes the rural agricultural population is given and unchanged.

② However, technological progress is undoubtedly accelerated, which will help accelerate the transfer of the surplus labor force from agricultural production to other non-agricultural sectors. It is thus concluded that citizenization should be completed sooner than the author of this paper initially expected.

③ Fei & Ranis, 1961

from which rural people scramble to flee. With a balanced distribution of factors in rural and urban China, there will be no substantial gap in people's livelihoods, rural China will no longer be tormented by disguised unemployment or a surplus labor force, and the commercialization point will be reached sometime around 2078^① right after the coming of the Lewis turning point.

A major challenge facing China now is that many aged and some young rural migrant workers do not have sufficient urban viability, and thus they cannot find a proper job in the cities and subsequently have to return to their rural hometowns for agricultural production. The already arrived "Lewis turning point",^② according to the academic circles, is as unstable as a rolling bead on a sloping board, which can from time to time roll back to the "original point." This is the characteristics of the "Lewis turning point" in China. The convergence of migrant workers' and college graduates' income,^③ along with migrant workers' returning to rural China, indicates that the Lewis turning point has already arrived. Such a "back-flow," however, can only be deemed the "earlier-than-expected withdrawal of migrant workers".^④ Migrant workers' insufficient viability prevents them from becoming permanent urban residents and they thus remain passers-by. After all, however long rural migrant workers live in "villages-in-town," they will not automatically become permanent urban residents in a real sense. The so-called "villages-in-town" (also known as urban villages) refers to villages that appear on both the outskirts and in the downtown areas of major Chinese cities. They are in a way the outcome of urbanization with the sacrifice of life quality of rural migrant workers with insufficient viability, who can only afford to live there and are engaged in providing less productive and efficient services.^⑤ The real reason behind migrant workers' "back-flow" lies in their insufficient viability. Apart from viability, there is also a need for growth in the modern sectors, without which the surplus labor force from the traditional sectors, such as agricultural production, will not be easily absorbed.

This paper estimates the population of surplus agricultural laborers based on the agricultural production scale of farmland. When scale management of farmland is realized, the surplus agricultural labor force will disappear, and the Lewis turning point^⑥ and the commercialization point^⑦ will successively arrive. This is in nature an analysis of citizenization from the perspective of farmers' professional attributes. Again, this paper

① Calculated based on the data from China Statistical Yearbook-2017.

② Cai, 2010

③ Cai, 2010

④ Fan, 2015

⑤ Overall, the average urbanization rate of Third World countries does not catch up with their average industrialization rate, although their industrialization and urbanization rates cannot compare with those of developed countries. In China, however, there is a different picture. Industrial tasks in many cities are primarily taken by migrant workers, who are not permanent registered residents in cities and are virtually passers-by there. For this reason, China features an excessively high rate of industrialization/urbanization. The nature of the labor market is thus transformed by the influx of migrant workers and can no longer be cleared by modern divisions with higher pay. Urban service sectors creates a large number of low-income jobs, which give rise to the emergence of less-efficient services. This indicates that the average industrialization-urbanization rate is relatively low in Third-World countries according to traditional standards. If this relatively low ratio proves to be correct, workers' income in urban service sectors (particularly irregular services) should be determined by the influx of migrant workers, and should be fairly low.

⑥ Lewis, 1954.

⑦ Fei & Ranis, 1975. That is to say a commercialization point lies in every type of productivity. In the context of a closed economy, the timing of the commercialization point varies from country to country. If agricultural productivity can reach 1,000 mu farmland per rural household by 2078, the arrival of the commercialization point will accordingly be suspended. Thus, what truly matters to society is the effectiveness of division of labor, the optimization of consumption structure, the sustainability of existing consumption model and the fairness of income distribution on the premise of efficiency. There will be another half a century before citizenization is completed. This is in fact a rather optimistic estimation, which requires steady growth of the macro-economy, a continuous increase in urban jobs, gradual elimination of outdated production facilities, progressive easing of the ever-widening "rich-poor gap," and a joyous transition to a demographic dividend-reliant society from an aging society. A brand-new society in a few decades is worth anticipation. Yet, the transitional period from now until then must be supplemented with part-time rural work.

concludes the analysis through Adam Smith's division of labor, that professional farmers are an inevitable outcome of labor division and that the citizenized population are the "drop-offs" of agricultural production during the process of labor division. When farmers' viability is not sufficient the seemingly already approached Lewis turning point cannot be stabilized, the commercialization point is not foreseeable, and the challenge of citizenization cannot be thoroughly tackled.

6. Viability, citizenization and the government's role

The government's institutional supply determines whether such viability can be enhanced. The government plays a leading role in this regard. As is known, the government is supposed to satisfy society's policy and institutional demand with policy and institutional supply. This indicates that farmers cannot acquire viability without government support. Such support is given in two approaches. The first is to invest in farmers and increase their per capita capital^① to help secure viability. The second is to alleviate or even eliminate the negative constraint of the existing household registration system on citizenization. The elimination of the negative impact of the long-lasting rural-urban dual household registration structure is, of course, to enhance farmers' viability. Farmers' acquisition of viability relies heavily on policy and institutional support from the government and with government support, farmers can acquire viability, which brings this argument back to the first logical aspect.

Regarding citizenization, the government should take the lead to give more policy support (e.g. injecting more investments), which can directly enhance farmers' viability; meanwhile, it should also ensure institutional supply to enhance their viability in an indirect way. The number of determinants and constraints are in inverse proportion to farmer' viability. To enhance farmers' viability and promote citizenization, it is necessary to gradually unleash the constraints on farmers. For example, adjustments should be made in relevant interests and benefits attached to registered residences.

Citizenization will remain a "wishful" policy objective unless migrant workers can have their urban viability significantly enhanced so the government should attach more importance to the enhancement of farmers' viability. There are two approaches to the improvement of farmers' viability. The first is "to invest in farmers"^② and increase their per capita capital^③ to improve farmers' employability skills in non-agricultural sectors. The other is to alleviate the existing household registration system's constraints on farmers. The three points mentioned earlier in this paper are to alleviate such constraints on farmers. Of course the first approach should outweigh the second. After all, only when farmers' per capita capital^④ is increased can capital deepening occur^⑤ and only when capital is deepened can migrant workers have their viability truly enhanced.

① Solow, 1956.

② Schultz, 2006, p. 150.

③ Solow, 1956.

④ Solow, 1956.

⑤ Solow, 1956.

7. Conclusions

Citizenization in China concerns three logical aspects.

First, farmers' viability determines whether they can be citizenized and whether scale management of farmland can be realized. The area of per household farmland determines the scale of the citizenization task and subsequently determines the duration of citizenization. Only when farmers acquire viability can they truly be citizenized, the transfer of surplus rural laborers to urban China be smooth and the scale management of farmland be advanced.

Second, viability determines the realization of scale management of farmland, which subsequently determines the convergence of rural and urban incomes and the coming of the Lewis turning point and the commercialization point. Only when scale management of farmland is realized can farmers enjoy higher pay and the rural-urban revenue gap be narrowed, and the Lewis turning point and commercialization point successively be realized.

Third, the government's institutional supply determines whether such viability can be enhanced. The first two logical aspects of citizenization do not concern the government. Nevertheless, farmers' acquisition of viability requires policy support from the government which is given in two approaches. The first is to invest in farmers^①, increase farmers' per capita capital^② and thus help secure viability. The second is to alleviate or even eliminate the negative constraint of the existing household registration system on citizenization. The elimination of the negative impact of the long-lasting rural-urban dual household registration structure is, of course, to enhance farmers' viability. With government support, farmers can acquire viability, which brings this argument back to the first logical aspect.

Only with viability can citizenization be sustainable and be achieved without extra effort. All relevant work should revolve around how to enhance migrant workers' viability in cities. Yet, there are prerequisites for farmers with such viability to be successfully citizenized. First, non-agricultural sectors should be developed well enough to absorb the population shifted from the agricultural sector.^③ Second, there is no twisted government policy hindering citizenization, for which farmers can step by step complete and optimize the division of labor according to their comparative advantages.^④

Government policy should focus on how to enhance farmers' viability. There are two approaches to the enhancement of farmers' viability. The first approach is "to invest in farmers"^⑤ to improve farmers' employment skills in non-agricultural sectors. The other is to alleviate the existing household registration system's constraints on farmers. In contrast, the first approach outweighs the second, because only an economic growth accompanied with a per capita capital growth can be identified as capital deepening.^⑥ Only when capital is deepened can farmers' viability be enhanced. The endogenous growth model proposed

① Schultz, 2006, p. 150.

② Solow, 1956

③ Take the USA as a counter-example. In the actual process of labor mobility, however, for a time the natural growth in rural-urban migration was beyond the in-take capacity of local urban industries in low-income agriculture-dominated regions of the USA (Frank T. Bachmura, 1959). As a result, such low-income agriculture-dominated regions could not reach the average productivity level of US agriculture and therefore could not realize income convergence (Frank T. Bachmura, 1959). Thus, their rural-urban population migration was hampered.

④ Unfortunately, China used to implement a rigid household registration system, which strictly restricted farmers to their rural hometown, including those not good at agricultural work. Yet, they were not allowed to go to cities for non-agricultural work.

⑤ Schultz, 2006, p. 150

⑥ Solow, 1956

by economists, along with the investment in human capital and the introduction of cutting-edge technology emphasized by total factor productivity, has testified the necessity of Schultz's calling for "investing in farmers."^① The quintessential essence of investing in farmers is to increase farmers' per capita capital^②, enhance their viability and transform China into a country with quality human resources from a country with vast human resources.

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(Translator: Wu Lingwei; Editor: Xiong Xianwei)

① Schultz, 2006, p. 150.

② Solow, 1956.