

delineated, that is, land transfer and modern agriculture, or termed 'the rise of agrarian capitalism' (Jiang and An 2003; Zhang and Donaldson 2008, 2010).

LAND TRANSFERS

During the initial phase of the HRS, there was a debate about the likely consequences of small scale land landholdings and the fragmentation of land plots, with most commentators arguing that small individual land holdings and fragmented tiny land plots would have a series of negative consequences, including low land productivity, constraints on accumulation and capital investment, obstacles in the application of new technology and in obtaining economies of scale, and hindrance for labour migration etc. Land transfers were recommended at the time as a way of tackling such problems (Yang 1985; Zhang 1988; Yuan and Lin 2013). However, the first journal article discussing land transfer was published by Jinglun Yang (1985) and the first with land transfer in the title was by Zonglun Zhang (1988). The number of journal articles on land transfer steadily increased since then and peaked after 2013 when commercial capital was searching for investment opportunities in agriculture and the countryside and the concept of family farm (*jiating nongchang*) was being strongly advocated by the government.

In this paper land transfer refers to the transfer of 'land use rights', that is, peasants who own the land contract rights (from the collective) and transfer the land use rights to other farmers or economic entities (Zhang 2001). This is to say that the land use rights are transferred while the contract rights remain with the peasants. As land is owned by the collective, when it is transferred, the three types of rights, ownership, contract and use, are then split. This is widely called 'the split - or the division - of three rights' (*sanquan fenli*) on rural land (Li 2002). Land transfer has become a massive movement within China, and is supported by policies, particularly by local governments. The other economic entities acquiring the land are mostly industrial capital interests from the cities.

The Evolution of Policies on Land Transfer

The policy of land transfer has undergone an evolutionary process, which reflects the development strategies of the state as well as the changing perceptions of central government on agriculture, the

countryside and peasants. Reviewing the official discourses and narratives on land transfer since rural reform in early 1980s, we can observe an obvious shift from strict prohibition on land transfers to relaxation, and promotion.

In early 1980s, land transfer was strictly forbidden. *The Regulations Concerning Land Requisition for National Construction*, issued by the Standing Committee of the Fifth National People's Congress in 1982 stated that, 'any entity is forbidden to purchase or rent land directly from rural communes, brigades and production teams or in any forms. Rural communes, brigades and production teams are forbidden to use land as shares for participating in any enterprise or business.' Article ten of the 1982 Constitution said that 'no organization or individual may appropriate, buy, sell or lease land, or unlawfully transfer land in other ways.' This prohibition of land transfer was the legacy of the centrally planned economy in the People's Commune period, and went hand in hand with the strict control of the countryside and rural production. Since the HRS came into effect, land contract rights have been in the hands of individual peasants, and thus have the potential to be more flexible.

The 1984 No. 1 Policy Document of the Central Government loosened the control on land transfer, stating 'encouraging the land to be concentrated in the master hands of farming; peasants who ask to not contract farmland or to contract less farmland due to their inability to carry out farming or doing other business, can hand their land over to the collective for future arrangement or, by approval of the collective, transfer their land contracts to others.' Although the policy on land transfer was relaxed at that time, land transfers rarely took place. This was because farmland was only newly distributed to peasants in early 1980s, and peasants had much enthusiasm for working their plots of land. In addition, rural-urban migration was still in its infancy stage, and most able bodied peasants remained in rural communities and worked in agriculture (Shi and Yu 2001; Zhao 2007). However, in some southeastern coastal regions, the Township and Village Enterprises (TVEs) were already highly developed in the 1980s, and many local peasants worked in these, they 'left the land but not their home villages, they entered factories but not the cities' (*litu bulixiang jinchang bujincheng*) (Kerkvliet and Selden 1998; Ye et al. 2010). This development posed a new challenge that some peasant households in these regions were no longer able to farm individually.

In response to this new challenge, the State Council approved trials on concentrating land

holdings in some coastal provinces and cities in 1987, which extended the transfer of land use rights beyond farming units and individual households. This marked the start of the trial phase of land transfer. However, this trial was not extended nationally to the countryside as a whole and was effectively suppressed by the extraordinary heavy agricultural taxes and levies at that time (see previous section), which resulted in land abandonment. Farming was not remunerative at this time and some peasants were subcontracting their farmland to others by paying some subsidies instead of claiming rent. Thus, land transfer did not take off on a widespread scale in the 1990s (Zhang 2001).

However, the Report to the 15th National Congress of CPC in 1997 highlighted the issue of agricultural modernization, and declared the importance of ‘promoting agricultural commoditization, specialization and modernization.’ In the Chinese context, agricultural modernization usually requires the scaling up of farmland plots, and so this can be seen as an encouragement for land transfer (Liu and Yan 2012; Yuan and Lin 2013).

The 2013 No. 1 Policy Document announced the intent ‘to inspire and support the contracted land to be transferred to specialized large-holders, family farms and peasants’ cooperatives, to facilitate certain scaling up of agriculture in various forms.’ This is a clear policy incentive for land transfer. Equally, a series of policy documents and practical guidance that favour land transfer have been issued by different state bodies. These include the *Notice on the Transfer of Land Use Rights of Peasant Household Contracted Land* (by the CPC in 2001), *the Law of the People's Republic of China on Land Contract in Rural Areas* (by the National People's Congress in 2002), *Measures for the Administration of the Transfer of Land Management Rights of Peasant Household Contracted Land* (by the Ministry of Agriculture in 2005), *The Real Rights Law of the People's Republic of China* (by the National People's Congress in 2007), *the Decision on Major Issues Concerning Rural Reform and Development* (by the Third Plenary Session of the 17th CPC Central Committee in 2008) and others (Zhang 2014).

In order to facilitate land transfers through open market transactions, a movement for certifying and registering land rights was established (Zhang and Chen 2013). The 2010 No. 1 Policy Document of the Central Government ‘*Suggestions on Enhancing the Concerted Urban and Rural Development and Strengthening the Development Foundation of Agriculture and the Countryside*’

advocated, ‘expediting the work of determining, registering and certifying the land rights for the collective ownership of land in villages, and the usufruct rights for rural house sites and collective construction land’. In the Report on the Work of the Government delivered at the First Session of the Twelfth National People’s Congress on March 5, 2013, Premier Wen Jiabao stated that, ‘we have made comprehensive progress in determining, registering and certifying collective land ownership, and carried out trials for registering contracted rural land use rights.’ These policy initiatives are *de facto* for facilitating rural land transfer (Zhou 2009; Tang and Zhang 2012).

On the Website of Fengyang County of Anhui Province, where the HRS initially emerged, one can find the following policy statement concerning land transfer and scaled-up land concentration.

Promoting land transfer in the countryside is conducive to optimizing the allocation of land resources, to solving the problems of fragmented and small-sized farmland operation, and increasing the economic returns to land. It is beneficial to the strategic adjustment of agricultural structure and contiguous land development and the scaling-up of agriculture, allowing for agricultural intensification and specialization. The conventional farming system is about to be altered by land transfers, bringing agricultural benefits and improving market competitiveness; the use of production factors (such as land, capital, technologies, and labour) will be optimized or re-allocated. This will accelerate rural labour migration and the comprehensive and integrated rural-urban construction leading to the realization of concerted rural-urban development (Fengyang County 2009).

The official narratives about land transfer can be traced back to the outset of the HRS, later accompanied by policies about ‘agricultural modernization’ and ‘the construction of the new socialist countryside’ and others. Since the start of the new millennium these laws and policy documents have established a solid foundation for promoting and supporting land transfer in China’s countryside. As such the volume of land transfer has increased in recent years (see Table 1).

Table 1. Scale of land transfers in China (2008-2013)

<i>Period</i>	<i>Areas of land transferred in</i>	<i>Land transferred as a percentage of the total</i>
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	<i>rural China</i>	<i>land contracted to peasant households</i>
By 2008	106 million <i>mu</i>	8.7
By 2009	150 million <i>mu</i>	12
By 2012	254 million <i>mu</i>	21.2
By 2013	340 million <i>mu</i>	26

Sources: author's summary from various reports (Wu 2013; Ministry of Agriculture 2014; Wang 2014).

According to data from Ministry of Agriculture (2014), by the end of 2013, the total land transferred in rural China reached 340 million *mu*, more than three times the amount that had been transferred by the end of 2008. This land accounted for around 26 per cent of the total land contracted to the peasant households. There were more than 2.87 million specialized large-holders/households with over 50 *mu* of land and more than 870,000 'family farms'. The peasant-household contracted land transferred to industrial and commercial enterprises/capital increased by 34 per cent between 2011 and 2012 and the figure in 2013 showed a rise of 40 per cent compared to 2012.

Potential Impacts on Peasants' Livelihood and Facilitation of Modern Agriculture

There have been a great number of media reports and academic papers on land transfer, particularly during the past two or three years. As more and more land is transferred and policies supporting this are implemented, there has been a growing debate over this issue amongst academics. The different views on land transfer mainly reside in the different aspects and foci of research, largely resulting from different disciplines and their traditions. This also reflects a trade-off of land transfer in reality, in terms of social impacts and economic benefits.

Many anthropologists and some sociologists tend to focus their discussion on the impacts of land transfer on peasants' livelihoods and rural society, and often deleterious ones. They point out the problems and negative implications of growing land transfers and warn local governments about the dangers of allowing large capital investments in agriculture (Chen 2011). They argue that big farms created by capital penetration into the countryside and land transfer are inappropriate for China's rural conditions, which are much better suited to small farms that bring greater economic and social benefits (He 2011). When land is freely transferred in the market, there is a potential risk

of land grabbing by capital and peasants are more liable to being dispossessed, as they are not well informed about changing markets (He 2013). Zhao and Tang (2011) argue that land transfers have harmed rather than improved the welfare of the peasantry. It is also argued that land transfers bring about changes in the income of peasant households, labour mobility and rural societal structure, and thus disrupt the conventional village order, differentiating the peasantry and intensifying conflicts within villages (Guan 2004, Wu 2009). When land is transferred, those peasants without off-farm work are deprived of their incomes, and the peasants temporarily working in the city and those living in the village but no longer relying on the land no longer have a safety net. In sum, it is argued that land transfers have negatively affected the livelihoods of most peasant households (Sun 2012). Some scholars argue that idle land should be concentrated in the hands of the village collectives, instead of being sold off to capital interests. The concentration of land in the hands of outside capital will hinder the future return of migrant peasants, potentially throwing them into crisis (Pan 2009).

Many economists and public policy specialists focus their discussion on the facilitation of land transfer for modern agriculture and economic efficiency. They believe that land transfer is an inevitable trend in economic development and an effective way of promoting rural modernization (Yu 2013, Dang 2014). They argue that it leads peasant households with low marginal outputs to contract their lands to those with high marginal outputs, and that an increase in land transactions encourages capital investment in land and helps realize the value of land (Yao 2000). Both the land and the labour can be reallocated appropriately and the utility of both land suppliers and demanders is increased, bringing economic benefits to both (Cao et al. 2007). Land transfer also plays a major role in agricultural modernization and scaling up (Ma and Cui 2002), and so is seen as a pivotal aspect of rural reform, enabling the effective flow and optimal allocation of resources, thus contributing to the growth of the rural economy (Xiao and Zhang 2002). Land transfers also ease the tension of a low land-tiller ratio, and encourage a well-organized transfer of labour. Land transfers can also allow a more scientific approach to agriculture, and the scaling up of agriculture can enhance agricultural specialization, so that commoditization and efficiency are greatly enhanced. As the agricultural structure adjusts, it becomes possible to develop a more export-oriented agriculture (Yang 2009).

Under the 30 years farmland contract law, peasants still firmly hold the land contract rights,

although the land use/management rights are transferred to a third party (mostly agribusiness and commercial capital), believed to be capable of significantly increasing the productivity of the land and to farm more efficiently. Such practices, which respect the collective ownership and peasants' contract rights, have been lauded by some scholars. They trust that agribusiness and commercial capital will foster an expansion of agricultural production (and thereby drive modernization) without eliminating the benefits to hundreds of millions of peasants. They see this as a win/win situation, which will allow the rise of agrarian capitalism in China to proceed, without the mass displacement of peasants that has occurred in some other countries (Yao 2000; Zhang and Donaldson 2008, 2010).

THE STATE'S DRIVE FOR AGRICULTURAL MODERNIZATION

To understand issues for Chinese land and agriculture, one has to keep the fact of 'over population and land scarcity' in mind. By the end of 2012, the total population of China reached 1.35404 billion, including 642.22 million rural residents and 711.82 million urban citizens (National Bureau of Statistics 2013). By the end of the same year, the total arable land was 2.027 billion *mu* (equivalent to 135.1585 million ha) (Ministry of Land and Resources, 2014)⁶. This represents an average of less than 0.1 ha of arable land per capita, or 0.21 ha per rural inhabitant. The arable land per agricultural worker is only 0.29 ha, which is 25 per cent of the world average, 40 per cent of that in India, 7.7 per cent of that in Brazil, five per cent of that in Italy, around two per cent of that in France and the UK, 0.4 per cent of that in the USA, and around 0.25 per cent of that in Canada and in Australia (Shi and Yu 2001).

Given the shortage of arable land per capita and its relatively low quality, food security has always been a politically sensitive issue in China, and the growth of grain production has been an ongoing government priority supported by a variety of policy measures and tighter control over land use (Carter et al. 2012). In order to ensure food security through domestic production, the Chinese government is pursuing what it terms 'the strictest land management and farmland protection' (Liu

⁶ There has been much controversy over the availability of arable land. Since the 1990s, rapid industrialization and urbanization in China have been continuously appropriating farmland. According to data from the Ministry of Land and Resources (2003, 2009), the total arable land decreased from 1.88895 billion *mu* (125.93 million ha) in 2002 to 1.82574 billion *mu* (121.716 million ha) in 2008. This trend has thrown serious doubts on the accuracy of the data that was released in 2012.

and Cheng 2007). A new set of tightened regulations have been introduced and are being strictly implemented to control transfers of farmland to non-agricultural uses (Carter et al. 2012). As we saw above, China has set a threshold or 'red line' of maintaining at least 1.8 billion *mu* (120 million ha) of farmland until 2020 (Long et al. 2012). This 'red line' of farmland shall not be crossed beyond no matter how much urban expansion and other developments seek to appropriate farmland. The National Food Security and Long-term Planning Framework (2008-2020), approved by the State Council, stipulated that China would 'adopt the strictest measures to protect arable land to ensure that the reserve of national arable land is no less than 1.8 billion *mu*'.

Besides maintaining the 'red line' of farmland uncrossed, agriculture modernization or modern agriculture has been the key measure for securing national food security. This has been the official discourse, largely advocated and promoted by the state and repeatedly underscored in most of the government dossiers since 1949. In the Report on the Work of the Government delivered at the First Session of the Third National People's Congress on 21 December 1964, based on the proposal made by Mao Zedong, Premier Zhou Enlai declared the strategic objective of the government that 'China is determined to develop into a strong country with modern agriculture, modern industry, modern defense and modern science and technology in the near future.' Since then, these 'Four Modernizations' (*sihua*) have become the overall blueprint for the country's development. As early as the 1960s and early 1970s Benedict Stavis (1974) documented quite a lot of modern agricultural practices in China, including the use of modern inputs, modern machines, modern irrigation, modern technology, modern ideology and modern collective organization.

During the HRS period, The term 'modern agriculture' was officially coined in the Report to the 15th National Congress of the CPC in 1997, and in the document '*Decisions by the Central Committee of the Chinese Communist Party on Several Key Issues in Rural and Agricultural Works*' in 1998. The No. 1 Policy Document of the Central Government since 2006 has addressed modern agriculture every year, with a particular focus in 2013 with the document '*Suggestions on Promoting the Development of Modern Agriculture and the Vitality of Rural Areas*'. The National Modern Agricultural Development Plan (2011-2015) has emphasized that more attention should be paid to the coordinated and concerted development of agricultural modernization, industrialization and urbanization. It argues that China needs to equip agriculture with modern material conditions,

renovate agriculture with modern sciences and technologies, increase agricultural production with modern industrial systems, enhance agricultural production with modern business methods and guide its development with modern development concepts and a newly-born type of the peasantry. It strongly recommends exploring a path of agricultural modernization with Chinese features. The plan includes the construction of 300 national demonstration sites of modern agriculture, which aim for high levels of specialization, standardization and the scaling up and intensification of agricultural production.

The objectives of modern agriculture are to ensure food security and domestic self-reliance in grain provision, increase peasants' incomes, and create rural employment opportunities and to preserve ecology and the environment. These objectives shall be pursued through employing modern agricultural science and technology, modern industrial equipment, modern management approaches, and modern business concepts, all operated by modern knowledgeable farmers and modern entrepreneurs. The coordination of production and marketing, commerce, industry and agriculture shall be the market mechanism (Ke 2007; Zhou and Geng 2007).

Since the 'first leap' of dismantling peoples' communes and implementing the HRS, the central leadership has regarded modern agriculture as the 'second leap' and repeatedly stated that the goal was to make a transition from traditional to modern agriculture and from extensive to intensive operations, and from uncoordinated and small-scale operations to coordinated and large-scale operations. The central government defines modernized agriculture as commercialized, specialized, scaled-up, standardized and internationalized (Zhang and Donaldson 2008). Certain land-related institutional adjustments, including land transfers, are required in order to modernize agriculture (Liu and Yan 2012; Yuan and Lin 2013).

Scientific agriculture and scaled-up agriculture are seen as integral components of modern agriculture. Therefore, agricultural science and technology is highly emphasized by almost all policies related to agricultural and rural development. The application of modern science and technology was already strongly underlined by the central government in the collectivization period (Stavis 1974). Nowadays, agricultural science, technology and research are widely recognized as the essential basis for modern agricultural transition (Yuan and Lin 2013). The 2012 No. 1 Policy Document of the Central Government laid great stress on the development of agricultural science

and technology to ensure domestic provision of grain production. The National Food Security and Long-term Planning Framework (2008-2020), anticipates that the future increases in yields of agricultural production will largely rely on the successful application of agricultural science and technology. The plan suggests that China supports and develops research in a number of key agricultural technologies, so as to achieve breakthroughs in grain yields.

As we discussed above, the state is particularly keen on scaled-up agriculture, both in the collective era and in the more recent years since the HRS. Scaled up agriculture is considered to be the epitome of agricultural modernization, and the millions of small holding producers are considered to be unable to respond to fluctuating markets, unable to compete effectively or respond to changes in domestic demand, unable to withstand pressure from international markets (especially after China's entry into the WTO), find it difficult to access markets and continue to have incomes that lag behind the rest of the economy (Guo et al. 2007). As such they need to be transformed into specialized, commercialized, vertically integrated and larger-scale agricultural units that can be competitive in export markets (Zhang and Donaldson 2008). Scaling up almost automatically implies that the small holdings of land plots will need to be transferred and concentrated (Zhang et al. 2002b). The 2013 No. 1 Policy Document of the Central Government suggested encouraging farming households to adopt advanced and suitable techniques and modern production factors that are in accordance with the requirements of scaling up, specialization and standardization, to catalyze transitions in agricultural production and management, to support land transfers to large specialized farms, family farms and peasants' cooperatives.

Moreover, the 2013 No. 1 Policy Document also officially stated the government's intent to 'encourage and guide urban commercial capital to invest in farming and livestock enterprises in rural areas'. Therefore, in recent years external capital investments have been directly made in agriculture and farming, with multiple forms of agricultural operations encouraged, such as large-holders, family farms and peasants' cooperatives. The 2013 No.1 Policy Document explicitly indicated that 'specialized large-holders and family farms should be supported and promoted through favourable policy and legal framework and subsidies and bonuses'. Particularly, the Ministry of Agriculture sees a family farm as 'a new type of operative entity in agriculture mainly based on family labours to pursue large scaled, intensified and commodified agricultural production

and operation' (Wang 2014). The family farm is seen as a legal entity, a business enterprise with a focus on the market and modernization, which in terms of the composition of production factors, labour attributes and products is very close to an agribusiness (Kong and Gao 2013; Wu 2013). In the discussion on family farms, scale is often a focal issue (Yuan 2013). In a national survey conducted by the Ministry of Agriculture (2013), one of the criteria of family farm is that the size of farmland (with a contract period of more than 5 years) in grain production should be over 50 *mu* (double cropping) or over 100 *mu* (single cropping). Clearly, the development of the family farm would demand land transfers from ordinary peasant households to such family farm owners (Kong and Gao 2013).

CONCLUSION AND DISCUSSION

The evolution of land and agriculture in China has been closely connected to the overall framework of the country's development paradigm and the associated governance politics, which have a strong focus on the pursuit of accumulation, industrialization and modernization. As one of the Four Modernizations, agricultural modernization has been always the national development goal. It primarily involves specialization, mechanization, scaling-up and technocracy. The persistent pursuit of agricultural modernization is distinctively reflected in the official narratives and various policies around land institutions and agricultural production. The path of agricultural modernization has not been an easy one, often encountering civil and international challenges. However, as a social actor, the authoritarian Chinese state has mobilized itself to respond to these challenges, while never abandoning the pursuit of agricultural modernization.

After 1949, communist China first mobilized peasants' mass power against their previous oppressors and quickly confiscated the land from landlords. This land reform served as a foundation for the subsequent collectivization: shortly after the land reform, individual small scale family-based land holdings were collectivized and all land came to belong to the state or a vaguely defined collective, which in reality was an extension or incarnation of the state. During this collectivization period, a large scale Green Revolution, based on a combination of high-yielding seeds, irrigation and chemical fertilizers, was launched (Kerkvliet and Selden 1998). It is obvious that the goal of land reform and collectivization was to nationalize farmland from the previous landlords step-by-

step, so that agricultural scaled-up operations could take place and agricultural sciences and technologies could be applied. This was the initial attempt at agricultural modernization, with the aim of contributing to primitive accumulation for the country's economic development and industrialization. Although peasants were relatively impoverished, the modernization achievements in agricultural and other sectors (e.g., industrial and infrastructure base, agricultural technologies, particularly the irrigation and soil improvement) in the collectivization era had laid a solid foundation for the economic take-off and agricultural and rural development in the HRS era since 1978. Without the former, the latter would not have succeeded as far as it has.

Although the state approved the grassroots-led innovation of HRS and agriculture returned to individual farming, the HRS never left any room for private land ownership. Moreover, since the outset of HRS, there has been support for potential land transfer, which has been always seen as a way of achieving scaling up and promoting a technocratic, mechanized, specialized and standardized agriculture. Peasant and peasant agriculture have never been the goal or ideal of the nation's modernization project, more ways of living and farming that should be abolished or transformed. Therefore, HRS was a responsive measure of the Chinese state to the problems and difficulties of national economy and peasants' livelihood in the late 1970s, while the pursuit of agricultural modernization has never been suspended. Following HRS, challenges emerged and innovative practices were quickly trialed, many of which are further attempts to scale up and modernize agricultural operations. For instance, the serious fragmentation of farmland plots and peasants' heavy burdens made agriculture less or non-remunerative, which further hampered investment in land and agriculture. The feminization and greying of agriculture that posed the question of 'who will till the land', together with the decline of farmland resulting from urban land developments, have brought huge concerns on agricultural production and national food security. All these challenges increased the urgency for larger land holders, in order that capital investment can be attracted and agriculture modernized. For instance, a study shows that a rise in the proportion of nonagricultural income or the migration rate increases the size of self-cultivated land significantly among relatively large farms (Wang et al. 2014). Development in recent years shows that land transfer has speeded up agricultural modernization.

As part of China's pursuit of achieving agricultural modernization, productivity and efficiency

have always been the focus of any changes within land and agricultural institutions, in order to create the basis for capital accumulation. Since 1949 there has been a clear drive for capital accumulation from agricultural sector to finance China's industrialization and urbanization. During the first 30 years of the collectivization period this took the form of socialist primitive accumulation and was based on the nationalization of the key factors of production, a centrally planned system, state-led development and state-directed accumulation. In the subsequent 30 years of de-collectivization it was based on the commodification of the key factors of production and a decentralized market system (Sargeson 2013). According to Henry Bernstein (2010), the primitive accumulation in the commune period, although labeled as 'socialist', was typically 'non-market' and 'extra-economically coercive', whereas in the HRS period, it has been characterized by the market-derived compulsion of economic forces. The latter has led to a gradual process of (semi-)proletarianization. For instance, the relaxation of household registration system and the promotion of rural-urban migration have greatly contributed to industrialization and urbanization. However, this has generated millions of semi-proletarianized peasant workers (Pun and Lu 2010). In the wake of the recent land transfers and agricultural modernization, a second wave of semi-proletarianization has been taking place: the proletarianization of the left-behind women and elderly, previously engaged in family-based individual farming, who have now become casual workers on land for which they have contract rights but where use rights have been transferred to external capital.

The institutional transitions of land and agriculture clearly demonstrate that China's development has been continuously urban biased and that agriculture and the countryside have been continuously supporting industry and the urban in various ways. In the commune period, an estimation of 600-900 billion *yuan* was siphoned from agriculture to industry between 1953 and 1978. In the HRS period, (between 1979 and 1994) the state extracted 150 million *yuan* from the rural sector to support industrial and urban development (Cheng 2004). Moreover, the massive rural urban migration is also a form of human resource extraction from the countryside to the cities. The countryside has also been continuously supplying many physical resources (such as minerals, sands etc.) to the cities for urban construction. Taking all this into consideration, the Chinese countryside is an open conduit, nourishing the cities. The very heavy tax and levies on peasants in the late 1990s, the land '*Balanced Increase and Decrease of Farmland*' policy in the mid-2000s, as well as the

recent penetration of capital into agriculture all show that the capital accumulation for industrial and urban development comes at the price of depleting agriculture and hollowing out the countryside.

In conclusion it is worth considering whether agrarian capitalism has risen in China or whether peasant agriculture still persists. Do China's *sannong* policies prioritize agricultural capitalization or peasants' livelihood? In reality, the former overwhelmingly takes priority but at the same time, there has been more and more resistance from the latter. There is no country in the world that can provide a roadmap for China's development trajectory, since China has so many unique characteristics: the very low ratio of land to people, the huge population (increasingly urbanized), the 166 million peasant workers in the cities and the 158 million children, women and elderly left behind in the countryside. Capitalist development and the market system have triumphed in many sectors and areas of Chinese life, including agriculture and the countryside. However, it is precisely at this moment, that we should probably pay more heed to Karl Polanyi's warning, that 'leaving the fate of soil and people to the market would be tantamount to annihilating them' (Polanyi 1944).

REFERENCES

- All-China Women's Federation, 2013. *The Report on Situations of Chinese Left-behind Children, Rural-Urban Migrant Children*. <http://acwf.people.com.cn/n/2013/0510/c99013-21437965.html> (accessed 10 December 2014).
- Bernstein, H., 2010. *Class Dynamics of Agrarian Change*. Halifax and Winnipeg: Fernwood Publishing.
- Brandt, L., J.K. Huang, G. Li and S. Rozelle, 2002. 'Land Rights in Rural China: Facts, Fictions and Issues'. *The China Journal*, 47: 67-97.
- Cao, J.H., H.Y. Wang and X.M. Huang, 2007. 'Evaluation of the Supply and Demand and Efficiency of Rural Land Transfer'. *Zhongguo tudi kexue*, 5: 54-60 (in Chinese).
- Cao, J.Q., 2000. *China along the Yellow River: A Scholar's Observation and Thinking on Rural Society*. Shanghai: Shanghai Literature & Art Publishing House.
- Carter, C.A., F.N. Zhong and J. Zhu, 2012. 'Advances in Chinese Agriculture and its Global Implications'. *Applied Economic Perspectives and Policy*, 34(1): 1-36.
- Chen, H.Q., 2002. 'On the Historical Changes of Rural Land System since the Founding of PRC'. *Nandu xuetan (Humanities and Social Sciences)*, 22(5): 70-9 (in Chinese).
- Chen, J., 2011. 'The Trajectories of Chinese Peasants' Burden: 1978-2010'. *Huadong jingji guanli*, 25(9): 58-60 (in Chinese).

- Chen, S.S., 2011. 'The Study of the Performance and Constraints of Land Transfer Policy: Based on Comparative Analysis of Eastern, Central and Western Parts of China'. *Shehui kexue*, 5: 48-56 (in Chinese).
- Chen, X.W., 2013. 'Accelerating Agricultural Modernization'. *Qiushi*, 2: 38-40 (in Chinese).
- Cheng, G.H., 2004. 'Abolishing Agricultural Taxes to Return Peasants' National Treatment'. <http://www.people.com.cn/GB/guandian/1033/2380445.html> (accessed 11 December 2014).
- Christiansen, F., 1986. 'An Analysis of Recent Developments in China's Land Legislation: Some New Trends in Chinese Land Ownership and Land Use'. *China Information*, 1(3): 20-31.
- Dang, G.Y., 2014. 'Rural Land Transfer is Inevitable Trend'. *Zhongguo nongcun keji*, 9: 14 (in Chinese).
- Deininger, K., S.Q. Jin, F. Xia and J.K. Huang, 2013. 'Moving Off the Farm: Land Institutions to Facilitate Structural Transformation and Agricultural Productivity Growth in China'. *World Development*, 59: 505-20.
- Du, P., 2004. 'Focus on "386199" Phenomenon and Care for Rural Left-behind Families'. *Renkou yanjiu*, 28(4): 25-36 (in Chinese).
- Fengyang County (People's Government of), 2009. 'The Significance of the Promotion of Land Transfer'. <http://www.fengyang.gov.cn/dt2111111405.asp?DocID=2111121185> (accessed 6 October 2014).
- Giles, J. and R. Mu, 2014. *Village Political Economy, Land Tenure Insecurity, and the Rural to Urban Migration Decision: Evidence from China*. Policy Research Working Paper 7080, World Bank.
- Guan, B., 2004. 'Land Subcontract in Guanzhuang Village'. *Shehuixue yanjiu*, 1: 99-106 (in Chinese).
- Guo, H.D., R.W. Jolly and J.H. Zhu, 2007. 'Contract Farming in China: Perspectives of Farm Households and Agribusiness Firms'. *Comparative Economic Studies*, 49: 285-312.
- Gurley, J.G., 1975. 'Rural Development in China 1949-72, and the Lessons to be Learned from It'. *World Development*, 3(7-8): 455-71.
- Han, J., 2014. 'New Interpretations of Land Transfer Policy'. *Xibu dakaiifa*, 5: 107-9 (in Chinese).
- He, X.F., 2011. 'On the Size of Farmland Management: Based on the Survey in Fanchang Municipality, Anhui Province'. *Nanjing nongye daxue xuebao (Social Science Edition)*, 11(2): 6-14 (in Chinese).
- He, X.F., 2013. 'Reply to Professor Zhou Qiren on Logic of Land Ownership'. *Huazhong nongye daxue xuebao (Social Science Edition)*, 3: 1-9 (in Chinese).
- Hinton, W., 1966. *Fanshen: A Documentary of Revolution in a Chinese Village*. Berkeley: University of California Press.
- Ho, P., 2005. *Institutions in Transition: Land Ownership, Property Rights, and Social Conflict in China*. Oxford: Oxford University Press.
- Hu, J.T., 2002. 'Sannong is the Top Priority'. *Zhongguo gaige*, 1: 4 (in Chinese).
- Huang, J.K., K. Otsuka and S. Rozelle, 2008. 'Agriculture in China's Development: Past Disappointments, Recent Successes, and Future Challenges'. In *China's Great Economic Transformation*, eds L. Brandt and T.G. Rawski, 467-505. Cambridge: Cambridge University Press.

- Jiang, Y.M. and Y.N. An, 2003. 'The Path Dependence and Innovations of Land Institutional Changes in Rural China'. *Jingjixuejia*, 3: 54-9 (in Chinese).
- Jiang, Z.M., 2002. 'Sannong Is the Priority Concern among All Issues'. *Zhongguo gaige*, 1: 4 (in Chinese).
- Ke, B.S., 2007. 'Some Thinking on Advancing Modern Agricultural Construction'. *Nongye jingji wenti*, 2: 18-23 (in Chinese).
- Kennedy, J.J., 2013. 'Finance and Rural Governance: Centralization and Local Challenges'. *The Journal of Peasant Studies*, 40(6): 1009-26.
- Kerkvliet, B.J.T. and M. Selden, 1998. 'Agrarian Transformations in China and Vietnam'. *The China Journal*, 40: 37-58.
- Kong, J.Y., 1993. 'Land Institutions in Rural China: Empirical Analysis of the Transformation Processes'. *Jingji yanjiu*, 2: 65-72 (in Chinese).
- Kong, X.Z. and Q. Gao, 2013. 'Family Farm Will Have Its Spring Season'. *Zhongguo nongcun keji*, 3: 26-9 (in Chinese).
- Kueh, Y.Y., 1988. 'Food Consumption and Peasant Incomes in the Post-Mao Era'. *The China Quarterly*, 116: 634-70.
- Kung, J.K.S. and S.Y. Liu, 1997. 'Farmers' Preferences Regarding Ownership and Land Tenure in Post-Mao China: Unexpected Evidence from Eight Counties'. *The China Journal*, 38: 33-63.
- Lai, Y.N., Y. Peng, B. Li and Y.L. Lin, 2014. 'Industrial Land Development in Urban Villages in China: A property Rights Perspective'. *Habitat International*, 41: 185-94.
- Li, C.P., 2002. *I Told the Premier the Truth*. Beijing: Guangming Daily Press.
- Li, W.Q., 2002. 'Land Transfer: the Inevitable Choice of Land Use Rights Change in Rural China'. *Taiwan nongye tansuo*, 3: 27-30 (in Chinese).
- Li, X.B. and X.H. Wang, 2011. 'Changes in Agricultural Land Use in China: 1981-2000'. *Asian Geographer*, 22(1-2): 27-42.
- Lin, G.C.S. and A.Y. Zhang, 2014. 'Emerging Spaces of Neoliberal Urbanism in China: Land Commodification, Municipal Finance and Local Economic Growth in Prefecture-level Cities'. *Urban Studies*, 0042098014528549.
- Lin, G.C.S. and S.P.S. Ho, 2005. 'The State, Land System, and Land Development Processes in Contemporary China'. *Annals of the Association of American Geographers*, 95(2): 411-36.
- Lin, Y.F., 1992. *Systems, Technology and China's Agricultural Development*. Shanghai: Sanlian and Shanghai People's Publishing House.
- Liu, G.D. and J.M. Cheng, 2007. 'Theories and Practices of Land Institutional Changes in Rural China since 1949'. *Zhongguo nongcun guan cha*, 2: 70-80 (in Chinese).
- Liu, J.P. and R. Yan, 2012. 'The Adaptability of Agricultural Land Institutional Changes to Modern Agriculture Development'. *Nongcun jingji*, 4: 27-31 (in Chinese).

- Long, H.L., Y.R. Li, Y.S. Liu, M. Woods and J. Zhou, 2012. 'Accelerated Restructuring in Rural China Fueled by 'Increasing vs. Decreasing Balance' Land-use Policy for Dealing with Hollowed Villages'. *Land Use Policy*, 29: 11-22.
- Ma, X.H. and H.Z. Cui, 2002. 'Establishing Land Transfer Institutions, Facilitating Regional Large-scale Agricultural Production'. *Guanli shijie*, 11: 63-77 (in Chinese).
- Ma, X.H., 1999. '50 Years of Rural China: Agricultural Collectivization and Institutional Changes'. *Dangdai zhongguoshi yanjiu*, 5-6: 70-97 (in Chinese).
- Ministry of Agriculture, 2013. *The first Statistical Survey Results of Nationwide Family Farm Development by Ministry of Agriculture*. http://sd.ifeng.com/zt/sdjtn/jdjtn/detail_2013_06/21/919015_0.shtml (accessed 4 October 2014).
- Ministry of Agriculture, 2014. '26% Contracted Land has been Transferred, Ministry of Agriculture Required No Forced Commands'. http://news.xinhuanet.com/fortune/2014-02/23/c_119460477.htm (accessed 6 October 2014).
- Ministry of Land and Resources, 2003. *Communiqué of the People's Republic of China on the 2002 Land and Resources*. http://www.mlr.gov.cn/zwgk/tjxx/200710/t20071025_659740.htm (accessed 5 October 2014).
- Ministry of Land and Resources, 2009. *Communiqué of the People's Republic of China on the 2008 Land and Resources*. http://www.gov.cn/gzdt/2009-04/01/content_1274266.htm (accessed 5 October 2014).
- Ministry of Land and Resources, 2014. *Communiqué of the People's Republic of China on the 2013 Land and Resources*. <http://www.mlr.gov.cn/xwdt/jrxw/201404/P020140422295411414695.pdf> (accessed 1 October 2014).
- Ministry of Land and Resources, 2014. *Communiqué of the People's Republic of China on the 2013 Land and Resources*. <http://www.mlr.gov.cn/xwdt/jrxw/201404/P020140422295411414695.pdf> (accessed 1 October 2014).
- Mu, R. and D. van der Walle, 2011. 'Left Behind to Farm? Women's Labor Re-allocation in Rural China'. *Labour Economics*, 18: 583-97.
- National Bureau of Statistics of the People's Republic of China, 2014. *Statistical Communiqué of the People's Republic of China on the 2013 National Economic and Social Development*. http://www.stats.gov.cn/tjsj/zxfb/201402/t20140224_514970.html (accessed 12 December 2014).
- National Bureau of Statistics of the People's Republic of China, 2013. *Statistical Communiqué of the People's Republic of China on the 2012 National Economic and Social Development*. Beijing: China Statistics Press.
- Pan, L., 2012. 'Historical Review and Contemporary Debates on the Concept of 'Peasantry''. *Zhongguo nongye daxue xuebao (Social Science Edition)*, 2: 34-48 (in Chinese).
- Pan, W., 2009. 'Whom Should Agricultural Land Be Transferred and Concentrated to?' *Hongqi wengao*, 5: 13-16 (in Chinese).
- Ploeg, J.D. van der and J.Z. Ye, 2010. 'Multiple Job Holding in Rural Villages and the Chinese Road to Development'. *The Journal of Peasant Studies*, 37(3): 513-30.

- Polanyi, K., 1957. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press.
- Pun, N. and H.L. Lu, 2010. 'Unfinished Proletarianization: Self, Anger, and Class Action among the Second Generation of Peasant-Workers in Present-Day China'. *Modern China*, 36 (5): 493-519.
- Qian, Z.H., 2000. 'Economic Analysis of Historical Changes of Land Institutions in Rural China'. *Jiangsu shehui kexue*, 3: 74-85 (in Chinese).
- Sargeson, S., 2013. 'Violence as Development: Land Expropriation and China's Urbanization'. *The Journal of Peasant Studies*, 40(6): 1063-85.
- Shi, H.B. and Y.F. Yu, 2001. 'Causes and Trends of Institutional Changes of Chinese Agriculture'. *Zhonggong zhejiang shengwei dangxiao xuebao*, 6: 25-9 (in Chinese).
- Stavis, B., 1974. *People's Communes and Rural Development in China*. Ithaca: Rural Development Committee, Center for International Studies, Cornell University.
- Sun, X.H., 2012. 'Land Transfer and Household Livelihood: Comparison of Two Land Transfer Models Based on Empirical Studies in Village T in Jiangxi Province'. *Guizhou shehui kexue*, 4: 77-83 (in Chinese).
- Tang, X.J. and Y. Zhang, 2012. 'Accelerating Verification of Land Rights, Promoting Land Transfer, and Facilitating Sannong Development'. *Hubei shehui zhuyi xueyuan xuebao*, 6: 64-6 (in Chinese).
- Wang, C.G., 2009. 'Positivist Analysis on the Semi-urbanization of Chinese Rural Urban Migrants'. *Xuexi yu tansuo*, 5: 94-103 (in Chinese).
- Wang, C.L., 2014. 'Three Key Issues on the Development of Family Farm'. *Nongye jingji wenti*, 1: 43-8 (in Chinese).
- Wang, G.J. and X.S. Zhang, eds, 1993. *The Study on Chinese Agricultural Modernization and Accumulation*. Taiyuan: Shanxi Economic Publishing House.
- Wang, X.B., F. Yamauchi, K. Otsuka and J.K. Huang, 2014. *Wage Growth, Landholding, and Mechanization in Chinese Agriculture*. Policy Research Working Paper 7138, World Bank.
- Wen, G.J., 1993. 'Total Factor Productivity Change in China's Farming Sector: 1952-1989. Economic Development and Cultural Change'. *Economic Development and Cultural Change*, 42(1): 1-41.
- Wen, T.J., 1996. 'Two Basic Contradictions that Constraint Sannong Issues'. *Jingji yanjiu cankao*, 5: 17-23 (in Chinese).
- Wen, T.J., 2000. *The Study on Basic Economic Institutions of Rural China*. Beijing: China Economic Press.
- Wu, H.F. and J.Z. Ye, 2014. 'Hollow Lives: Women Left Behind in Rural China'. *Journal of Agrarian Change*, on line version 15 September, DOI: 10.1111/joac.12089.
- Wu, J., 2009. 'From a Legal Perspective to See the Evolution and Transformation of Land Tenure Institutions in China'. *Front. Law China*, 4(4): 568-600.
- Wu, K.Q., 2013. 'Theoretical Analysis of Family Farm'. *Jingji zongheng*, 6: 65-9 (in Chinese).
- Wu, X.Y., 2009. 'The Transfer of Rural Land Use Rights and the Transformation of Village Governance'.

- Zhengzhixue yanjiu*, 6: 45-53 (in Chinese).
- Wu, Y.S., 2013. *China Aging Development Report (2013)*. Beijing: Social Sciences Academic Press.
- Xiao, F. and G.H. Zhang, 2002. 'Efficiency Analysis of Rural Land Use Rights Transfer'. *Wuhan daxue xuebao (Social Science Edition)*, 55(5): 532-6 (in Chinese).
- Xu, B.J., 2007. *Priority among Priorities: Thoughts about Sannong*. Beijing: China Agriculture Press.
- Yang, C.M. and S. Wang, 2002. 'Alternatives of Institutional Changes of Chinese Agriculture'. *Caizheng yanjiu*, 9: 12-22 (in Chinese).
- Yang, J.L., 1985. 'The Overall Reform of Land Institutions in Rural China'. *Nongye jingji congkan*, 2: 12-15 (in Chinese).
- Yang, X.C., R. Prosterman and X.B. Xu, 2001. 'Evaluation of the Implementation of Rural Land 30 Years Contract Policy'. *Zhongguo nongcun jingji*, 1: 55-66 (in Chinese).
- Yang, X.D., 2009. 'An Analysis on the Development and Performance of Agricultural Management Organizations in HRS: from Institutional Economic Perspective'. *Noingye jingji wenti*, 8: 38-44 (in Chinese).
- Yao, Y., 2000. 'Land System in Rural China: an Analytical Framework'. *Zhongguo shehui kexue*, 2: 54-65 (in Chinese).
- Ye, J.Z. and L. Pan, 2011. 'Differentiated Childhoods: Impacts of Rural Labor Migration on Left-behind Children in China'. *The Journal of Peasant Studies*, 38(2): 353-75.
- Ye, J.Z. and Y.H. Meng, 2012. 'The Linking Between Increase and Decrease of Land and Its Logic of Developmentalism'. *Nongye jingji wenti*, 10: 43-50 (in Chinese).
- Ye, J.Z., 2002. *Processes of Enlightenment: Farmers' Initiatives in Rural Development in China*, PhD dissertation, Wageningen University, Wageningen.
- Ye, J.Z., 2006. *Construction of the New Countryside: Farmers' Perspectives*. Beijing: Social Sciences Academic Press.
- Ye, J.Z., 2011. 'Grassroots Voices/Left-behind Children: the Social Price of China's Economic Boom'. *The Journal of Peasant Studies*, 38(3): 613-50.
- Ye, J.Z., C.Y. Wang, H.F. Wu, C.Z. He and J. Liu, 2013. 'Internal Migration and Left-behind Populations in China'. *The Journal of Peasant Studies*, 40(6): 1119-46.
- Ye, J.Z., J. Rao and H.F. Wu, 2010. 'Crossing the River by Feeling the Stones': Rural Development in China'. *Rivista di Economia Agraria*, LXV(2): 261-94.
- Ye, J.Z., Y.H. Wang and N. Long, 2009. 'Farmer Initiatives and Livelihood Diversification: From the Collective to a Market Economy in Rural China'. *Journal of Agrarian Change*, 9(2): 175-203.
- Yu, A.M., 2013. 'Several Major Issues of Land Transfer'. *Zhengce*, 11: 38-41 (in Chinese).
- Yuan, G.L. and J.Z. Lin, 2013. 'The Impacts of Agricultural Land Institutional Changes on China's Agricultural Transformation'. *Huanan nongye daxue xuebao (Social Science Edition)*, 12(2): 11-20 (in Chinese).

- Yuan, S.N., 2013. 'Family Farm: Approaches of Agricultural Modernization in China'. *Nanfang nongcun*, 4: 4-15 (in Chinese).
- Zhang, H., X.F. Li and X.M. Shao, 2006. 'Impacts of China's Rural Land Policy and Administration on Rural Economy and Grain Production'. *Review of Policy Research*, 23(2): 607-24.
- Zhang, H.B. and C.B. Chen, 2013. 'Effects of Collective Land Rights Verification on Rural Land Transfer: Based on a Case Study of A County'. *Jiangxi nongye daxue xuebao (Social Science Edition)*, 12(2): 166-9 (in Chinese).
- Zhang, H.Y., 2001. *Political Economy Analysis of Land Institutional Changes in Rural China*, PhD dissertation, Southwest University, Chongqing.
- Zhang, H.Y., M. Liu and H. Wang, 2002a. 'Land Use Institutional Changes in Rural China: Periodization, Diversification and Policy Adjustments'. *Nongye jingji wenti*, 2: 12-20 (in Chinese).
- Zhang, H.Y., M. Liu and H. Wang, 2002b. 'Land Use Institutional Changes in Rural China: Periodization, Diversification and Policy Adjustments (second)'. *Nongye jingji wenti*, 3: 17-23 (in Chinese).
- Zhang, J., 2014. *The Narratives of Capital-Led Land Transfer: The Case of Ge Village in Sichuan Province*, Master Thesis, China Agricultural University, Beijing.
- Zhang, J.C. and Q. Zhang, 2006. 'A Survey on the 50 Million Left-behind Women's Abnormal Survival'. *Zhongguo jingji zhoukan*, 10: 14-19 (in Chinese).
- Zhang, J.X., 2003. *Research of Chinese Agricultural Institutional Changes*, PhD dissertation, Fudan University, Shanghai.
- Zhang, L.X., 2003. 'Agricultural and Rural Development in China'. In *Agricultural Development and the Opportunities for Aquatic Resources Research in China*, eds L.X. Zhang, J. Liu, S.F. Li, N.S. Yang and P.R. Gardiner, Malaysia: WorldFish Center.
- Zhang, Q.F. and J.A. Donaldson, 2008. 'The Rise of Agrarian Capitalism with Chinese Characteristics: Agricultural Modernization, Agribusiness and Collective Land Rights'. *The China Journal*, 60: 25-47.
- Zhang, Q.F. and J.A. Donaldson, 2010. 'From Peasants to Farmers: Peasant Differentiation, Labor Regimes, and Land-Rights Institutions in China's Agrarian Transition'. *Politics & Society*, 38(4): 458-89.
- Zhang, Q.F., Q.G. Ma and X. Xu, 2004. 'Development of Land Rental Markets in Rural Zhejiang: Growth of Off-farm Jobs and Institution Building'. *The China Quarterly*, 180: 1040-62.
- Zhang, X.S., 1993. *Agricultural Dramatic Transformation and Strategic Choices in China*. Beijing: China Price Press.
- Zhang, Z.L., 1988. 'Brief Analysis of the Establishment of Transfer Mechanism of Land Use Rights'. *Nongcun jingji*, 7: 28-9 (in Chinese).
- Zhao, S.Q. and S.P. Tang, 2011. 'A Fuzzy Evaluation of Welfare Changes Before and After Land Transfer Based on Sen's Theory'. *Tongji yu juece*, 11: 51-4 (in Chinese).
- Zhao, Y.L., 2007. 'Government Actions in the Processes of Agricultural Institutional Changes'. *Shandong shifan*

daxue xuebao (Humanities and Social Sciences), 52(6): 145-50 (in Chinese).

Zhao, Y.Q., 2007. 'The Study on Peasants' Burden in Contemporary China (1949-2006)'. *Zhongguo jingjishi yanjiu*, 3: 97-106 (in Chinese).

Zhou, P.G. and J.L. Chen, 2007. 'The Study on the Impact of Abolition of Agricultural Taxes on Agricultural Labors'. *Zhongguo xingzheng guanli*, 5: 59-62 (in Chinese).

Zhou, Q.R., 2009. 'Verification of Land Rights is the Precondition and Foundation of Land Transfer'. *Nongcun gongzuo tongxun*, 14: 40 (in Chinese).

Zhou, Y.H. and X.H. Geng, 2007. 'Modern Agriculture: Meaning, Characteristic and Development Trends'. *Zhongguo nongxue tongbao*, 23(10): 33-6 (in Chinese).

Zhou, Z.P., 2008. 'The Hollowing of China's Rural Population and Its Challenge'. *Renkou yanjiu*, 32(2): 45-52 (in Chinese).

Zhu, Q.Z. and H.Q. Yang, 2011. 'Who is Farming? Survey and Reflection on Rural Work Force'. *Zhongguo nongye daxue xuebao (Social Sciences Edition)*, 28(1): 162-9.