

Case Report

# Marketization of Collective-owned Rural Land: A Breakthrough in Shenzhen, China

Yonghua Zou 1,2,†, Wanxia Zhao 2,†,\* and Robert Mason 3,†

- School of Public Administration, Nanjing University of Finance and Economics, 3 Wenyuan Rd Qixia, Nanjing 210046, China; E-Mail: yonghuazou@gmail.com
- Institute of Urban Development Studies, Nanjing University of Finance and Economics,
  Wenyuan Rd Qixia, Nanjing 210046, China
- <sup>3</sup> Department of Geography and Urban Studies, Temple University, Philadelphia, PA 19122, USA; E-Mail: rmason@temple.edu
- † These authors contributed equally to this work.
- \* Author to whom correspondence should be addressed; E-Mail: wanxia0619@gmail.com or 9120141015@njue.edu.cn; Tel.: +86-186-5201-6978.

External Editor: Tan Yigitcanlar

Received: 6 October 2014; in revised form: 20 November 2014 / Accepted: 28 November 2014 /

Published: 9 December 2014

**Abstract:** This study focuses on analyzing the ongoing land policy reform that allows collective-owned rural land transactions in the open market in Shenzhen, China. Employing a case study method, we investigate this land policy evolution through description and contextual analysis. We argue that the existing dual-track land administration system, within which the state administers market transactions, has contributed to numerous social problems, such as urban land scarcity, inefficiency of land resource allocation, and exacerbated social injustice. Following the recent actions of the central government, a collective-owned rural land parcel in Shenzhen was officially transferred in November 2013, an action viewed as a landmark step in reforming the current dual-track land system. Though the generalization of Shenzhen's experiment nationwide faces significant barriers, Shenzhen's breakthrough in liberalization of the rural land market indicates that China is moving toward a potential new round of land policy revolution.

**Keywords:** land policy reform; marketization of land; collective-owned land; construction land; dual-track land system; case study

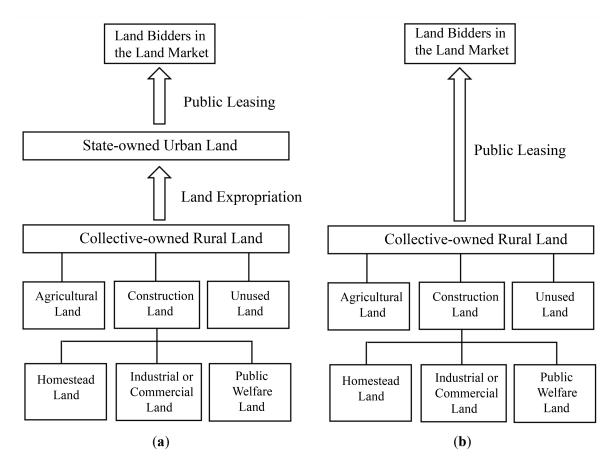
#### 1. Introduction

On 20 December 2013, the use right of a collective-owned rural land parcel in Shenzhen was officially sold in the market [1]. According to the Land Management Law in China, the use right, which is separated from land ownership, of rural land is banned from being transferred unless it has been expropriated by a city government and the land has been converted, in advance, to urban land. The rural land use right sold in Shenzhen is the first trial of the marketization of collective-owned rural land not only in the city but also nationwide. The Chinese government expects that Shenzhen's experiment can pave the way for establishing an urban-rural unified land market and promoting integrated and coordinated urban-rural development. Many commentators, scholars, and policy analysts assert that Shenzhen has launched a new-round land policy revolution in China [2,3].

After China entered the reform era at the end of the 1970s, the first-round urban land policy revolution also happened in Shenzhen. Before the 1980s, China employed a socialist land allocation system and the land market was practically nonexistent. Under that system, land was tightly controlled by the state and allocated free of rent or sale costs. This administrative allocation system was criticized for its inefficiency and unsustainability. For instance, the system could not effectively control the demand for urban land; this resulted in widespread inefficiency of land resource allocation and ambiguous ownership rights. Even worse, the absence of a land market became a barrier to attracting foreign investment, because foreign investors needed land with clearly defined property rights [4]. To satisfy those foreign investors, the government decided to reform the land allocation system, with a bottom line of not violating the constitutional designation that all land is owned by the state [4]. As a compromise, land use rights and land ownership were separated. On 9 September 1987, for the first time nationwide, Shenzhen transferred land use rights to an investor. This event was a landmark step in the first revolution in land policy, and it had profound impacts on the country's subsequent economic development and urbanization. Indeed, the transfer of land use rights in Shenzhen challenged the existing laws at that time [4]. Following Shenzhen's action, the central government launched several institutional changes, including the promulgation of the Land Management Law in 1986 and the amendment of Article 10 of the Constitution in 1988. The new law established the dual-track administration system, which has played a critical role in China's economic development over the past three decades. Figure 1a exhibits the mechanism of the dual-track administration system. Under this system, urban land is ultimately owned by the state, but its land use rights can be transferred in the market. City governments lease urban land use rights to developers through a public leasing process. Usually, the leasing term for urban land use rights is 70 years for residential use, 50 years for industrial use, and 40 years for commercial use. Rural land, which is classified according to usage as agricultural land, construction land, or unused land, is owned by village collectives; its construction land use rights can be transferred in the market after it is expropriated by the government and converted to urban land. Under the current inter-governmental fiscal structure and within the context of rapid industrialization and urbanization, however, the prohibition on

marketization of land use rights of rural-owned collective land has revealed its drawbacks. More and more policy analysts have called for a new round of land policy revolution [5,6]. Over the last decade, many local governments have explored methods of transferring rural land at the local level, but Shenzhen has again distinguished itself by taking a significant and innovative step.

**Figure 1.** Comparison of rural land transaction procedure under the dual-track land transaction system (a) and the Shenzhen breakthrough land transaction system (b).



Based on an examination of the challenges faced by the current dual-track land system, this paper focuses on analyzing the very recent policy reform of allowing rural land use rights transactions in Shenzhen. This reform is still in its nascent stage, but has significant potential influence on the country's future economic, urbanization, and land-administration policies. The remainder of this paper proceeds as follows. The second section examines the drawbacks of the current land system. The third section reviews the marketization of rural land at the local level. The fourth section discusses the policy implementation of the Shenzhen experiment. The fifth section considers the challenges in the marketization of rural land, followed by a conclusion.

# 2. Drawbacks of the Current Dual-Track Land System

From the outset of the first land policy revolution in Shenzhen, the dual-track land administration system has played a critical role in China's industrialization and urbanization. The dual-track land system, however, is a product of compromise between investors' demands and the constitution. As economic development continues to progress, the dual-track land system faces increasing challenges.

First, the dual-track land system severely constrains the land supply in some urban areas. Due to large-scale urbanization and industrialization over the past three decades, China has consumed a great deal of urban land. From 2000 through 2010, the urban population increased by 45.9%, but built-up areas increased by 64.45% [7]. In 2013, the urbanization rate in China reached 53.73%, increasing from 36.22% in 2000. If urbanization continues to accelerate, each 1% increase in the urbanization rate will consume around 670,000 hectares of urban land [2]. Compared with the short supply of urban land, approximately 18 million hectares of collective-owned construction land is available in rural areas, which is 2.5 times more than the amount of construction land in urban areas [7]. To meet the demand for more urban land, city governments have accelerated the expropriation of rural land. City governments expropriate rural land at non-market prices, but sell it at market prices. While governments claim a large share of the resultant profits, collectives and farmers receive little. This inequity is one of the reasons that farmers have resisted local governments' efforts to requisition rural land.

In addition, China launched a tax reform in 1994, which fundamentally changed the inter-governmental fiscal structure landscape. Under the 1994 tax reform, the central government shifted responsibility for public service provision to local governments, but the share of tax revenue for local governments deceased [8-10]. Local governments thus have had to rely on extra-budgetary revenue, such as land conveyance fees, to finance local public expenditures. Because local governments monopolize the urban land market, they can lease land out using different strategies to maximize revenue, depending on the land uses. On the one hand, local governments transfer more than 70% of land into industrial uses at low sale prices [8]. Industrial land can attract investment, generate a steady revenue stream, create jobs, and make municipalities more competitive for investment. More importantly, industrial investment can enhance local GDP, which is an important criterion used by the central government to evaluate local officials. At the same time, local governments constrain land supply for housing development. Because China has not introduced a property tax, local governments are inclined to collect lump-sum land conveyance fees. Some local governments even limit the acreage allocated for housing in order to push the land price higher through competitive bidding for scarce land [11]. From this perspective, the government's monopoly of the urban land supply has caused soaring housing prices and low housing affordability that has triggered widespread social discontent.

Second, under the dual-track system, rural land use becomes highly inefficient. Not satisfied with the rather meager compensation they receive for rural land expropriation, farmers would often construct buildings on their rural land rather than allowing urban governments to expropriate the land. Many industrial and residential buildings were developed for rent or for sale on these lands. These buildings, however, are banned for transfer into the market because the rural land has not been officially converted to urban land. The residential buildings are called property-limited houses (*Xiaochanquan Fang*). By 2013, China had more than 6.6 billion square meters of property-limited housing, and the limited-property housing exceeds 20% of all housing stock in some cities [12]. Residents can live in property-limited houses, but cannot transfer or mortgage them legally. Moreover, property-limited housing is usually of poor quality and residents are unable to enjoy basic public services because the rural land has not been integrated into the urban development planning system. So far, the central government has not moved to legalize property-limited housing. In addition, many village collectives constructed large numbers of industrial buildings for Town and Village Enterprises (TVEs) in some areas when TVEs boomed in the 1980s. After many TVEs collapsed, starting in the mid-1990s, a great

many industrial buildings became vacant. Neither urban governments nor rural collectives can take full advantage of those collective-owned construction land parcels with vacant building sites on them; this is because collectives are reluctant to allow urban governments to appropriate land with vacant buildings, yet they are not allowed to transfer the land and buildings in the market. As a result, some collective-owned rural land faces the predicament of becoming "land beyond legal use" for both governments and collectives [2].

Third, the dual-track land system is at the root of many land-use related problems, such as violence and social unrest. Because farmers receive relatively little benefit from land expropriation, they are reluctant to give up their land use rights. The dual-track land system has increased tensions between local governments and farmers, by putting them into competition over capturing increases in land values [10]. In 2011, land appropriation and forced relocation triggered about half of all civil unrest in China [7]. Each year, there are approximately 4 million disputes over land appropriation, the majority of which are about compensation for forced demolition; between 2010 and 2012, at least 17 provinces reported conflicts over land expropriation [7,13]. Scandals involving forced demolition are widely reported in the mass media and the practice has been heavily criticized by the public [7]. As farmers become increasingly aware of their potential rights, they seek greater compensation for enforced relocation—and, as a result, tensions between farmers and local governments increase [7,13,14]. Moreover, land expropriation and forced demolitions create many landless farmers. From 1990 through 2008, approximately 88 million farmers become landless [13], with many of them receiving such limited compensation from land expropriation that they have been forced to join the ranks of the urban poor.

Overall, the dual-track land system results in urban land scarcity and higher housing prices, inefficient use of land, violence prompted by forced demolitions, a growing landless population, and increased social injustice. While the dual-track system is one of the root causes of China's many social problems, the marketization of rural land is proposed as part of the solution to those problems.

#### 3. Explorations of Collective Land Marketization at the Local Level

Under the dual-track land system, farmers have rural land use rights but cannot directly trade in the market. The system, however, has not prevented farmers from transferring land use rights under the table. To secure land value appreciation arising from urbanization, farmers have sought to sell or rent rural land use rights without going through the process of land expropriation [4].

The dual-track land system produced an active and pervasive black market for rural land transactions, especially in coastal areas experiencing rapid urbanization and huge demand for construction land. Underground land transactions take many forms, including the so-called "Guangdong model" and "Jiangsu model" [15]. Guangdong, situated in the Pearl River Delta and known as the "world factory," is the forerunner of openness and reform in China. Since the 1980s, massive foreign investment has flooded into Guangdong. The huge demand for construction land has incentivized farmers in this region to lease rural land to generate profits. Firstly, they transferred their land use rights to joint companies established by the farmers themselves. The joint companies then leased land to factories on behalf of farmers. Under this framework, farmers are shareholders of joint companies and share benefits with the joint companies [15]. Jiangsu Province, in the Yangtze River Delta, is where collectives first transferred rural land to farmers. Farmers independently constructed factory buildings and warehouses on their land,

which they would then rent. In Kunshan Industrial Park in Jiangsu province, 25% of industrial and commercial land was transferred by farmers directly [15]. Both the Guangdong and Jiangsu models are spontaneous, unconventional approaches to the transaction of rural land, and they have played a critical role in alleviating urban land shortages in the context of rapid industrialization and urbanization. These efforts, however, conflict with current land law and are deemed illegal. Notwithstanding, some local governments turn a blind eye to these illegal transactions due to their role in alleviating land shortages and attracting investment.

Besides the spontaneous efforts mentioned above, some local governments have proactively enacted reforms through several pilot programs aimed at opening rural construction land to development. Early in 2005, troubled by urban land shortages, the government of Guangdong promulgated the "Regulation of Transferring of Collective-owned Land," which permits collective-owned rural land to be transferred legally in the same manner as urban land. The regulation, however, has been hard to implement due to a lack of requisite legal support. Over the last two decades, 22 provincial governments have explored various methods for the marketization of rural land. However, because there is a lack of legal protection and policy support from the central government, local governments have been very cautious in their attempts to promote such new approaches to collective-land marketization [7]. To push these local level efforts forward, a top-down restructuring of the legal and institutional frameworks for land institutions is necessary.

# 4. The Shenzhen Breakthrough

The central government of China has realized the challenges associated with the current dual-track system and has designed several policies to reform relevant land institutions. Early in 2008, the Third Plenary Session of the Communist Party's 17th Central Committee, one of the country's most important political meetings, stipulated that local governments could not requisition land for purposes other than public welfare projects. The goal here is to permit farmers to realize greater economic benefits from potential land value appreciation [7]. In addition, the central government launched a new urbanization strategy, namely "urbanization of the people," to integrate farmers into urban life through establishment of a unified urban-rural land market [7]. A landmark policy was advocated in the Third Plenary Session of the Communist Party's 18th Central Committee, which closed on 12 November 2013. In this meeting, the central government issued "The Decision on Several Important Issues Related Comprehensively to Deepen the Reform," which encourages farmers to transfer or mortgage their rural land in the market [16]. It is one of the strongest policy signals in recent years showing that the central government is seeking to liberalize the collective-owned rural land market and enhance the efficiency of land resource allocation. According to the new policy, rural land is allowed to enter into an urban-rural unified land market and enjoy the same values as urban land [7].

As a city with an exhausted urban land base that is also in the vanguard of reform in China, Shenzhen promptly responded to the policy guidelines advocated by the Communist Party's 18th Central Committee. There is no question that in recent times Shenzhen's development has been severely constrained by a shortage of urban construction land. In 2010, Shenzhen had 1992 square kilometers of land, of which 916 were agricultural land, 918 were construction land, and 158 were unused land [3]. Three hundred and ninety square kilometers, which comprises 42.5% of all available construction land,

is collectively owned [3]. By 2020, Shenzhen's available urban construction land is forecast to fall to 59 square kilometers [3]. This urban land shortage is a primary motivation for the Shenzhen government to make a breakthrough in the marketization of rural land.

Following the guidance of the Communist Party, the Shenzhen government decided to sell the use right of a collective rural land parcel in the open market; this action represented a major breakthrough in land-use policy. Figure 1b illustrates the mechanism of this transformational land transaction system. The primary difference between the traditional dual-track system and the Shenzhen breakthrough system is that the latter allows collective-owned rural land to be leased to land bidders in the market directly, while the former requires converting collective-owned rural land to state-owned urban land through expropriation before it can be leased to bidders. Designated for industrial use, the parcel's site area of 14,600 square meters could be developed to a total gross floor area of 69,900 square meters. The land had been transacted at a price of 116 million yuan, with an average price of 1560 yuan per square meter, which was higher than the average urban industrial price in the surrounding area. The local government can claim 70% of the proceeds, while the collective receives the remaining 30% and an additional 13,980 square meters of space in the developed building at no cost [1]. Farmers have stated that they are satisfied with the benefits they received from this transaction of land use rights [1]. The Shenzhen case is an experiment in changing the current dual-track land policy. If the Shenzhen experiment is accepted by local governments, farmers, and the public, the central government will encourage other cities to follow Shenzhen in transferring rural land directly into the market.

The Shenzhen experiment has many strengths. Besides alleviating the shortage of urban land supply and increasing farmers' incomes, the primary strength is that the ownership rights of land buyers can be protected by the government. They can use land as leverage for mortgages or other purposes [7]. In addition, buildings constructed on the land can be covered under urban comprehensive planning schemes, and thus can enjoy the infrastructure and public services provided by urban governments. These benefits will encourage more developers and other entities to buy collective-owned rural land.

# 5. Challenges in Implementation of the Policy of Rural Land Transaction

Despite recent optimism arising from the Shenzhen breakthrough in land reform, the marketization of urban land still faces many barriers under the current institutional infrastructure. The first barrier lies in flaws and ambiguities in the existing legal system. Similar to the unconstitutional situation when the Shenzhen government transferred urban land use rights in 1986, trading use rights of collective-owned rural land prior to land expropriation remains illegal at the moment. If the central government expects the Shenzhen experience to extend to other cities, then new laws and institutions need to be established to enable the practice; indeed, even the constitution would need to be amended.

Second, the marketization of rural land breaks the central government's monopolization of urban land supply and hurts the interests of some local governments. Some local governments that do not face a land shortage like Shenzhen's would want to maintain their monopolization of land supply and maximize revenue. Due to the huge investments that they make in infrastructure, local governments usually bear a heavy debt burden [16]. According to the National Audit Office, local governments faced a 17.9 trillion yuan debt as of June 2013, equal to approximately 31.5% of China's GDP in 2013 [17]. Given this situation, local governments continue to rely heavily on land conveyance fees to meet their debt

obligations. Allowing the marketization of rural land not only limits local government authority in land expropriation, but also decreases land values and may limit revenue from land conveyance. As the reform affects many stakeholders, there are still divergences of opinion regarding rural land transactions. Some governments are in favor of implementing an incremental reform prudently and cautiously, in order to allay social discontent by converting more rural land and increasing compensation rates to farmers, while at the same time maintaining local governments' authority over land appropriation [7,18].

In addition, the Shenzhen experiment in the marketization of urban land did not cover homestead land and agricultural land, which comprise the majority of rural lands in China. Currently, for rural land to enter into the market, existing usage regulations must be followed; that is, only land designated for industrial usage is allowed to transfer into the market. The government does not permit homestead land to trade because current laws cannot control speculation involving the homestead land. For instance, the government is concerned about those farmers who sell their homestead land after they build a house on it [7]. When farmers sell their rural homestead land, they may lose their only property, and this may contribute to increased homelessness, urban poverty, and slum formation [7]. Furthermore, according to the latest urbanization strategy, the government also prohibits counter-urbanization, which means that urban residents cannot purchase rural homestead land or build residential buildings on such land [18].

The prohibition on the sale of agricultural land in the market is a significant political concern in China. China is short of arable land. In 2013, arable land accounted for less than 14% of the country's total land area; per capita arable land was 0.101 hectares, which is far below the world average of 0.225 hectares [4,19]. In order to enhance national food security, the central government set a "redline" that prohibits the total amount of arable land from shrinking to less than 1.8 billion mu (120 million hectares); the 2013 arable land base area, by comparison, was 2.03 billion mu (135 million hectares) [20]. Yet, as part of China's recent dramatic increase in urbanization, many farmers have left rural areas and moved to urban regions, abandoning their homestead and agricultural land. The result has been the creation of many "hollow villages" in rural areas [21]. Finding effective solutions for the transaction of these abandoned rural lands will be critical in enhancing the overall efficiency of land resource allocation.

# 6. Conclusions

Promotion of urban-rural integration, coordinated development, and a more stable urbanization process is a leading challenge facing the Chinese government today. Establishing an urban-rural unified land market is a potential solution to this challenge. The prohibition on the transition of rural land under the current dual-track land system, however, has resulted in under-appraisal of rural land and has contributed to many social problems, such as urban land scarcity, inefficiency of land resource allocation, and exacerbated social injustice. Following the recent actions of the central government, Shenzhen officially transferred a collective-owned rural land in the open market, an action viewed as a landmark step in reforming the current dual-track land system.

The generalization of Shenzhen's experiment nationwide faces some barriers, including the need for further amendments to the existing legal system and a rescaling of government powers in land expropriation. Because the reform involves an interest redistribution for a wide range of stakeholders, the central government has to be cautious in putting forward this reform. These concerns notwithstanding,

Shenzhen's breakthrough in liberalization of the rural land market indicates that the Chinese government is moving toward a potential new round of land-policy revolution.

# Acknowledgments

This research was supported by: (1) the Outstanding Innovation Team Development in Philosophy & Social Science of Jiangsu Higher Education Institutions; (2) the Priority Academic Program Development of Jiangsu Higher Education Institutions; (3) the NSFC under Grant 71301070; and (4) Jiangsu Planning Office of Philosophy and Social Science under Grant 13SHC014. The authors would like to thank two anonymous referees for their constructive comments, which have resulted in an improved manuscript.

#### **Author Contributions**

This paper represents a result of teamwork. Yonghua Zou and Wanxia Zhao raised the idea and wrote the manuscript; Robert Mason provided constructive suggestions and revised the manuscript. The three authors contributed equally to this work.

#### Conflicts of Interest

The authors declare no conflict of interest.

#### References

- 1. Xinhua Net. The first rural land in Shenzhen enters the market with a transaction price of 116 million Yuan, and the collective will join the stock of the enterprise that purchased the land. Available online: http://news.xinhuanet.com/house/hk/2013-12-23/c\_118659768.htm (accessed on 1 February 2014). (In Chinese)
- 2. Caixin. Shenzhen puts parcel of rural land on market. Available online: http://english.caixin.com/2013-11-07/100601953.html (accessed on 8 January 2014).
- 3. The Economic Observer. Shenzhen launches "breakthrough" land reform. Available online: http://www.eeo.com.cn/ens/2013/0201/239576.shtml (accessed on 5 January 2014).
- 4. Lin, G.C.; Ho, S.P. The state, land system, and land development processes in contemporary China. *Ann. Assoc. Am. Geogr.* **2005**, *95*, 411–436.
- 5. Deng, F.; Huang, Y. Uneven land reform and urban sprawl in China: The case of Beijing. *Prog. Plan.* **2004**, *61*, 211–236.
- 6. Green, S. China—A little hope for land reform in Shenzhen. Available online: https://research.standardchartered.com/configuration/ROW%20Documents/China\_%E2%80%93\_ A\_little\_hope\_for\_land\_reform\_%E2%80%A6\_in\_Shenzhen\_06\_03\_13\_02\_25.pdf (accessed on 2 January 2014).
- 7. Caixin. Why land reform efforts remain on the back burner. Available online: http://english.caixin.com/2013-09-19/100584273\_1.html (accessed on 5 January 2014).
- 8. Tao, R.; Su, F.; Liu, M.; Cao, G. Land leasing and local public finance in China's regional development: Evidence from prefecture-level cities. *Urban Stud.* **2010**, *47*, 2217–2236.

- 9. Ding, C. Land policy reform in China: assessment and prospects. *Land Use Policy* **2003**, *20*, 109–120.
- 10. Ding, C. Policy and praxis of land acquisition in China. Land Use Policy 2007, 24, 1–13.
- 11. Huang, Y. Low-income housing in Chinese cities: Policies and practices. *China Q.* **2012**, *212*, 941–964.
- 12. Xinhua Net. The number of property-limited housing exceeds 6.6 billion square meters; it is very hard to handle due to the huge amount. Available online: http://news.xinhuanet.com/house/bj/2014-01-13/c 125997264.htm (accessed on 25 February 2014).
- 13. Sargeson, S. Violence as development: land expropriation and China's urbanization. *J. Peasant Stud.* **2013**, *40*, 1063–1085.
- 14. Wong, K.K.; Zhao, X.B. The influence of bureaucratic behavior on land apportionment in China: The informal process. *Environ. Plan. C* **1999**, *17*, 113–126.
- 15. Zhou, Q. Urban and Rural of China; China Citic Press: Beijing, China, 2013.
- 16. Zou, Y. Contradictions in China's affordable housing policy: Goals *vs.* structure. *Habitat Int.* **2014**, *41*, 8–16.
- 17. Xinhua Net. Four problems behind local governments' debt need to be solved. Available online: http://news.xinhuanet.com/finance/2014-01/20/c\_126028839.htm (accessed on 5 February 2014). (In Chinese)
- 18. Xinhua Net. Limits set as China pushes urbanization. Available online: http://www.globaltimes.cn/content/836867.shtml#.UxX3t ldUa8 (accessed on 20 January 2014).
- 19. China Net. The average capital arable land decreased to 1.52 mu, less than the half of the world average level. Available online: http://news.china.com.cn/2013-12/30/content\_31040350.htm (accessed on 20 January 2014). (In Chinese)
- 20. China News Net. The second national land resource investigation shows that the total area of arable land increased to 135.385 million hectares. Available online: http://finance.chinanews.com/house/2013/12-30/5677282.shtml (accessed on 10 November 2014). (In Chinese)
- 21. Long, H.; Li, Y.; Liu, Y.; Woods, M.; Zou, J. Accelerated restructuring in rural China fueled by "increasing vs. decreasing balance" land-use policy for dealing with hollowed villages. *Land Use Policy* **2012**, *29*, 11–22.
- © 2014 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).