

## Capturing the transformation rent: Lessons from Mexico and China\*

ALAIN DE JANVRY

SHAODA WANG

➔ ALAIN DE JANVRY is Professor of agricultural & resource economics at the University of California at Berkeley. He is Senior Fellow at Ferdi.

➔ SHAODA WANG, University of California at Berkeley.

### Abstract

In the course of economic growth, an economy incurs a structural transformation along which the share of agriculture in employment and GDP declines sharply. This creates a “transformation rent” when land is correspondingly retired from agriculture to be used for housing and industrial development. In China, with lack of property rights over land for farmers, this rent has been appropriated by local governments and used to finance the public goods necessary for urbanization and industrialization. In Mexico, where property rights were assigned to farmers, this rent is privately appropriated by land reform beneficiaries. In China, this has created huge conflicts, but successfully financed the structural transformation and contributed to rapid economic growth. In Mexico, a peaceful transformation is being achieved, but at the cost of severe under-investment in public goods for the transformation. This role of property rights in the structural transformation has remained relatively under-studied, resulting in sub-optimal social and/or fiscal support for the transformation. Yet, it potentially has huge policy implications that need to be addressed.



\* This policy brief is based on our participation to the workshop on “Land and Development” organized by the University of Chicago’s Center in Beijing on June 19-20, 2015.

The theory of property rights over land is deceptively simple: property rights should be complete, formally registered, and secure. Following Ostrom, (2001), complete property rights include the rights to access, extract, manage, rent to others, and sell or transfer to descendants. Private property, with titles registered in a cadaster and legally enforced meet this criterion. According to the Chicago Property Rights School (Demsetz, 1967), land will then be used maximally efficiently. Long-term investments in land improvements can be made. Retiring farmers can rent their land to younger farmers, securing a pension for themselves and giving access to land to a new generation of farmers. Rentals and sales can consolidate allow consolidating land into optimal farm sizes and under the management of the most productive farmers (Deininger, 2003). Land reform can be used to install these optimum property rights. If land markets fail, land reform can also be used to consolidate the land in the optimum farm size, which would be smallholder farmers if there is a labor market failure (and no capital market failure and no economies of scale in production or marketing), creating an inverse relation between total factor productivity and farm size. Land reform guided by this inverse relation will can achieve both efficiency and equity gains. (Lipton, 2010).

Reality is however far different. Open access resources remain pervasive, for instance in much of Sub-Saharan Africa. Common property resources without the ability to cooperate in management to achieve a pattern of land use identical to what would obtain under complete property rights is pervasive as well (Ostrom, 1990). And many lands are occupied without formal title and held under precarious conditions. In China land is neither private (all agricultural land is controlled by Collective Economic Organizations or CEO which are groups of households that most often correspond to the village, while all urban land

belongs to the national state), nor formally registered (the CEO has records of land allocation, but there is no national land cadaster with formal land registration), and not securely held (the CEO can reallocate land among farmers based on need and the Township Government -the next level of governance above the Village- can retire land from farming for non-agricultural uses following quotas of land sales set by the central government, as described by Rithmire, 2015). In Mexico, for 70 years under the ejido system, land was not private (but held in usufruct or common property, making it impossible to use the land as collateral), could not be freely used (but subject to a whole set of constraints forcing direct use by the beneficiary), and not secure (beneficiaries could be removed and land given to candidates-in-waiting by a higher level authority if use rules were not respected). Why is there such a blatant discrepancy between theory and practice?

## 2. Authoritarianism and incompleteness

State-led land reforms have proven to be essentially impossible to achieve under democratic forms of governance. This is because the current landed elites control the state and can block any attempt at redistributive reform. A “lucky” event is when foreign powers have taken on the process of land reform. This was the case in post WWII occupation of Japan, Taiwan, South Korea, and also Southern Italy. In this case, complete property rights can be granted since the foreign power has no stake in using the land for another purpose than efficiency, usually following redistribution along the inverse relation. Smallholder farmers were thus endowed with land titles in these hugely successful land reforms. Short of this, land reforms had to rely on authoritarian governments that had the power of opposing the landed elites, and the interest in doing so for consolidating their power, fending a counter-re-

form, and building a supportive clientele among the land reform beneficiaries. This was extensively documented by Albertus (2010) and Albertus et al. (2015) in analyzing the conditions under which 45 land reforms occurred over the last 100 years, most of which happened in the context of presence of foreign powers or authoritarian governments. In China, land reform was done by the Communist Party in 1949-52 following a civil war, reorganizing farming in collectives. In Mexico, it was done by the PRI between 1917 and 1992 that ruled as an autocratic government and placed half of the country's land in agrarian communities, the ejidos. In all cases, property rights granted to the land reform beneficiaries were highly incomplete, with a heavy hand of the state in guiding land use and deciding on eventual reallocations.

The reality of land reform is thus that it requires authoritarianism to occur endogenously, and that it resulted in highly incomplete property rights for the sake of political control.

What happened next was strongly influenced by the incompleteness of property rights and the heavy hand of the state. Unrecognized in the theory of property rights is that land reform has several functions:

- a. *An efficiency function*, essential for economic growth if agriculture is to fulfill its role for economic development: the provision of a food surplus, of a labor surplus, and of a financial surplus for use by industry. If there is an inverse relation, this function is best fulfilled by smallholder farmers; if there are economies of scale (for example in producing soybeans and cotton in Brazil), by a large farm sector. These surplus transfers are necessary conditions for a successful transformation of the economy.
- b. *A political function* in securing a reliable clientele for the authoritarian party in power. This is best achieved under incomplete property

rights, as beneficiary farmers will continue to depend on state tutelage and public transfers to overcome market failures. Incomplete property rights are thus not a mistake, but part of a calculus of the multifunctional purpose of land reform. It will eventually imply a trade-off between efficiency and control objectives.

- c. *A fiscal function* as a source of revenues in support of the public investments necessary for the structural transformation of the economy. Typically not recognized in "agrarian" land reforms, is the fact that large tracts of land will eventually be retired from agriculture in support of urbanization and industrialization, and that the value of land in non-agricultural uses will be a multiple of its value in agriculture. Who captures this "transformation rent" can be an enormous source of private or public wealth.

### 3. The Mexican dilemma: Rent dissipation

In Mexico, the first land reform done by the PRI between 1917 and 1992 was very successful at creating a political clientele, but this was achieved at the cost of agricultural stagnation, extensive rural poverty, and delayed territorial growth where expropriations had been extensive. After an initial period of successful growth where the state invested massively in water control and infrastructure, market failures and incomplete incentives frustrated productivity growth. The ejido sector turned more toward subsistence corn cultivation than the production of high value crops. Control was achieved at the cost of stagnation and poverty, and stagnation and poverty further consolidated dependence on the state and clientelism as the sector fell dependent on the provision of social assistance (Albertus et al., 2015).

Faced with negotiating the NAFTA agreement and accession to OECD membership in 1994, the PRI, with President Salinas de Gortari in power, decided to give complete property rights to the land reform beneficiaries, effectively initiating a second land reform. This reform was implemented through the Procede program that titled the land in 34,000 ejido communities over a 14 years period running from 1993 to 2006. It followed the principles of complete property rights: private titles over cultivated land (keeping forests and pastures in common property with a share allocated to each ejido member), titles were formally registered in a national cadaster (the National Agrarian Registry), and titles were secure in being constitutionally guaranteed and protected by civil law.

Implications were severe. The PRI lost political support as a consequence of the reforms and was for the first time in 70 years defeated in the presidential elections (de Janvry et al., 2014). Complete property rights and constitutional guarantee of these rights implied that beneficiaries no longer needed the tutelage of the authoritarian party. They shifted their vote to a pro-market liberal party (the PAN) more aligned with their newly acquired economic interests, and this party won the presidential election. Attempts at political reforms to make the PRI more pro-market and thus more appealing to the new landowners failed. The old guard of the PRI, opposed to the property rights reform, won the congressional mid-term elections and the progressive PRI candidate to the presidency, Luis Colosio, was assassinated. Freedoms to manage the land in one's own best interest led to a huge wave of migration to the cities and the US border (de Janvry et al., 2015). Agriculture between 1980 and 2011 registered a labor productivity gain of 45% compared to 26% in manufacturing, and a 24% decline in services (Sanchez, 2013). Efficiency gains in land use were achieved, but at the cost of loss of political dominance. Authoritarian parties thus have

an advantage in expropriating the land to initiate a land reform, but would need to reform politically to remain appealing to the constituency of beneficiaries under complete property rights.

Land titles granted to beneficiaries can also be transformed into rights that can be sold for urban development (so-called *dominio pleno*). To this date, some 10% of titles have thus been transformed and sold, allowing the land reform beneficiaries to cash in the "transformation rent". By titling the land, this rent was thus dissipated as a potential source of public revenues to be invested in support of the structural transformation. While wealth transfers under the form of titles to households who remained in farming were not dissipated, whether wealth transfers under the form of a huge cash-in-hand "transformation rent" were dissipated or invested is to this stage unknown.

#### 4. The Chinese dilemma: Open conflicts and unsustainable rent extraction

In China, like in Mexico, land was expropriated under authoritarianism and allocated to beneficiaries with highly incomplete property rights. Currently, rural land has three levels of ownership. The lowest level is the CEO or Collective Economic Organization. Typically a village has several CEOs, each consisting of a group of rural households. The second level is the village which has an elected leader and an appointed party secretary. The highest level is the township, typically composed of 20 to 40 natural villages. In principle, the property right of all the land for agriculture, forestry, fishery, and housing of the CEO members belong to the CEO. This category accounts for roughly 90% of all rural land. The village owns land for uses such as village schools, village firms, and administrative offices. The township owns the land for township hospitals, enterprises, and administrative offices. But in rea-

lity, when converting rural land to urban use, the township or the county (the next higher administrative unit above the township) governments, through various kinds of political influence and harassment, usually have much larger bargaining or decision-making power than the CEOs. When communes were transformed in the early 1980s into individual tenures under the Household Responsibility System, there was a huge gain in land productivity relative to previous use where the commune system strongly discouraged individual effort. Yet, productivity gains remained below potential due to two sources of insecurity in access to land. First, until the 1990s, land could be reallocated by village authorities from one household to another in accordance with changing labor force availability and consumption needs. Households who temporarily migrated to the city could lose some of their land; those with more labor force according to the demographic cycle (in spite of long-term homogeneity in accordance with the one child policy) could be allocated more land. According to Jacoby, Li, and Rozelle (2003), this discouraged long-term investments in land improvements, favoring for example labor effort over organic fertilizer use. The other major source of land insecurity was retirement of land from agriculture by village leaders for industrial and urban development. As the right for townships to raise taxes on agriculture was cancelled by the central government in 2006 to control for what were becoming crushing local taxes on peasants, local governments turned to another lucrative source of public revenues: capturing the “transformation rent”. Minimal compensations were given to land occupants with no bargaining power as they had no property rights over the land in usufruct. Land could in turn be leased at a high price to non-agricultural investors. Revenues from this rent could be invested in the public goods necessary to attract local investors. This fueled China’s industrial boom at the township and village level, favored by the

Hukou system that restricted migration to the major cities. Industry thus had to go to where labor was, as opposed to the classical structural transformation with rural labor migrating to urban industries. Today, with 34% of the labor force employed in industry, nearly 50% of the population is still classified as rural, an unusual model of industrialization (and hence structural transformation) without corresponding urbanization (Pomeranz, 2015).

This extraordinarily successful industrialization strategy, with unparalleled sustained rates of economic growth, had two weaknesses. The first was an explosion of civilian conflicts over land retirements, with strong deligitimization of local governments while it had no bearing on political support to the central government from which the model (and the land quotas allowed to be retired from farming) originated, at least for as long as it could deliver high rates of economic growth. This contributed to the weakening of local governance and to the use of strong-arm electoral tactics by the party to promote the election of local leaders favorable to cheap land retirements (Tao, 2015).

The second is long-term unsustainability of using public capture of the “transformation rent” as a substitute for township tax collection. The central state is highly concerned with food security, imposing a ceiling of 5% on grain imports to meet national consumer demand. This translates into a minimum land area to be preserved at the national level for grain cultivation. The attractiveness of capturing the transformation rent for local public finances and personal enrichment has induced local officials to accelerate land retirement from agriculture. This minimum land area for food security has now been reached. With grain yields near the agronomic maximum, there is little scope for technological change to substitute for land. Retiring land from agriculture and cashing in on a transformation rent has become increasingly difficult. Local governments can

create some new land for agriculture and convert the original agricultural land into urbanization. For example, by reclaiming wasteland for agricultural production, land which is usually much less productive, they can retire an equal area of existing current agricultural land, even if agricultural output decreases. Another typical way of cashing in transformation rents is to take over the housing land of rural residents, which is possible since property rights of housing land belong to the CEOs, and to move the villagers into multi-story buildings. Much space is thus saved and the extra land can be converted into urbanization use. Relocation into these multi-story buildings has been a source of frequent conflicts between farmers and village authorities as they deeply transform traditional farmer lifestyles.

## 5. The future of land reform in Mexico and China

Land reform must be seen as more than an instrument to enhance the role of agriculture in development. It is also an instrument of political control and a mechanism to appropriate transformation rents. Comparative experience suggests lessons for the two countries. The argument is summarized in Figure 1.

In Mexico, a big question is whether the transformation rent is being wasted for local development, as well as for private investment. As acquiring *dominio pleno* and selling land for

urban development progresses, it is clear that there is a missed opportunity to generate fiscal revenues that are sorely missing in Mexico where the fiscal burden is particularly low, and where attempts at fiscal reforms to increase tax revenues have repeatedly failed. Two initiatives can be suggested. One is to assist farmers-turned-rentiers to productively invest the cash-in-hand transformation rent bonanza. While information is missing on this, experience with lottery winners and with cash compensations for displaced inhabitants by public works programs suggests that rapid dissipation and ruined livelihoods tend to be the norm. The second is the need to revise taxation on capital gains, capturing publicly a fair share of the appreciation in land value between when granted as *Procede* certificate and when sold under *dominio pleno*.

In China, a big question is whether there will be, like in Mexico, a “second land reform”, leading to the assignment of land titles and complete property rights. There are two big issues here. The first is the management of political risk as learned from the Mexican experience. Independent owners may want to have more say in economic affairs that affect the way they use their newly acquired assets. For this, more participatory governance may be needed. A significant gain would be the end of conflicts over land retirement. But a new front of conflicts may open if landowners consider that they do not have enough jurisdiction over the policies that affect assets use.

Mexico and China			
Authoritarian expropriations Incomplete property rights			
Mexico	First land reform	Second land reform and urbanization	
	++ Political control -- Economic growth	-- Loss of political control + Economic gains -- + Large migration ? Urbanization rent to peasants (dissipated?) -- No public revenues from land reconversion	
China	HHRS	Urbanization/land taking	Second land reform/titling?
	++ Political control (-) Economic growth (insecurity)	++ Rents to local governments + Macro-management of inflation (quotas) -- Strong conflicts with peasants -- Not sustainable (food security)	(-) Political risk, but end of conflicts + Labor release, land consolidation Need fiscal reform

**Figure 1 : The challenge of land reform in Mexico and China on a comparative basis**  
Signs indicate the strength and direction of the relation with land reform

The second is the need for fiscal reforms to restore a tax base for local governments as they lose access to the transformation rent. Increasing fiscal transfers from higher levels of government may not be sufficient, as they do not support accountability to the local citizenry. Fiscal reforms need to be urgently addressed as the extraction of a transformation rent runs into the constraint of food security. If the land was also used as a social safety net through reallocation by local governments across households according to need (a practice that has strongly diminished), then not only are fiscal reforms needed, but also reforms in social assistance programs to secure village welfare.

By contrast to Mexico, a potential huge advantage of complete property rights for China is to accelerate the release of labor from agriculture in a context of global labor scarcity, and to facilitate land transactions and the consolidation of the land into large farms with mechanization. While this may not increase the productivity of the land (mechanization substitutes for labor, not for land), it will favor rising rural incomes, reduce rural-urban income disparities and the associated conflicts, and contribute to the reduction of residual poverty.

The challenge of a second land reform for China thus needs to be carefully addressed, but could make a major contribution to sustained economic growth and improved rural welfare.

## ► References

- **Albertus, M.** 2010. "Democracy and the threat of redistribution in Latin America". Department of Political Science, Stanford University.
- **Albertus, M., A. Diaz-Cayeros, B. Magaloni, and B. Weingast.** 2015. "Authoritarian Survival and Poverty Traps: Land Reform in Mexico." Department of Political Science, University of Chicago.
- **de Janvry, A., K. Emerick, M. Gonzalez-Navarro, and E. Sadoulet.** 2015. "Delinking land rights from land use: Certification and migration in Mexico." *The American Economic Review*, forthcoming.
- **de Janvry, Alain, Marco Gonzalez-Navarro, and Elisabeth Sadoulet.** 2014. "Are land reforms granting complete property rights politically risky? Electoral outcomes of Mexico's certification program." *Journal of Development Economics* 110(September): 216–225.
- **Deininger, K.** 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank Publications.
- **Demsetz, H.** 1967. "Toward a Theory of Property Rights." *American Economic Review* 57(2): 347–359.
- **Jacoby, H., G. Li, and S. Rozelle.** 2003. "Hazards of Expropriation: Tenure Insecurity and Investment in Rural China." *American Economic Review* 92(5): 1420–1447.
- **Lipton, M.** 2010. *Land Reform in Developing Countries: Property rights and property wrongs*. London: Routledge Publishers.
- **Ostrom, E.** 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- **Ostrom, E.** 2001. "The Puzzle of Counterproductive Property Rights Reforms: A Conceptual Analysis." In de Janvry et al., eds., *Access to Land, Rural Poverty, and Public Action*. Oxford University Press.
- **Pomeranz, K.** 2015. "Land and economic development in China: Some long-run perspectives." History Department, University of Chicago
- **Rithmire, M.** 2015. "Land and management of Chinese capitalism." Harvard Business School.
- **Sánchez, M.** 2013. "The search for Mexico's economic progress." Bank of Mexico. <http://www.banxico.org.mx/publicaciones-y-discursos/discursos-y-presentaciones/presentaciones/%7B1E35691C-A895-8C20-49B7-F94AC975E707%7D.pdf>
- **Tao, R.** 2015. "Land taking and the politics of electoral rule setting: Evidence from Chinese rural democracy." Economics Department, Renmin University of China.



Créée en 2003, la **Fondation pour les études et recherches sur le développement international** vise à favoriser la compréhension du développement économique international et des politiques qui l'influencent.



### **Contact**

[www.ferdi.fr](http://www.ferdi.fr)

contact@ferdi.fr

+33 (0)4 73 17 75 30

n° ISSN : 2275-5055

