



# THOUGHT LEADERSHIP BRIEF

## Sowing Seeds of Mobility: The Uneven Impact of Land Reform

Jin Wang

### KEY POINTS

- ▶ In many developing countries, labor transition from farming to other industries is hindered by mobility barriers, especially land tenure insecurity. Farmers may have usage rights but not ownership. Policies like “use-it-or-lose-it,” where unused land can be redistributed by the state, discourage farmers from seeking non-agricultural jobs due to the risk of losing land income.
- ▶ In China, land tenure insecurity associated with the hukou (household registration) system leads rural households to designate “guard labor” to maintain land rights. This role often falls to women due to perceived gender roles in market and home production, limiting their mobility and keeping many of them in agriculture.
- ▶ Since 2003, two significant land policy reforms have aimed to protect the rights of agricultural households to lease and rent farmland. These reforms have facilitated more rural women to move into the non-agricultural sector compared to their male counterparts. But this influx has contributed to a decline in urban employment and wages for women relative to men.
- ▶ The Chinese experience highlights that gender-neutral policies can inadvertently create gender-specific mobility barriers through intra-household decision-making. Future reforms in developing countries should aim to enhance land tenure security, promote equitable labor mobility, and consider the effects on both rural and urban populations.



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### ISSUE

Land tenure insecurity, resulting from incomplete property rights, is a common issue in rural areas of developing countries. This insecurity hinders the transition of labor from farming to other industries. In response to these land market challenges, households often keep some members on the farm to protect their land. Women are more likely to take on this role and remain in agriculture due to traditional perceptions of gender roles, where men are seen as having a comparative advantage in non-agricultural work.

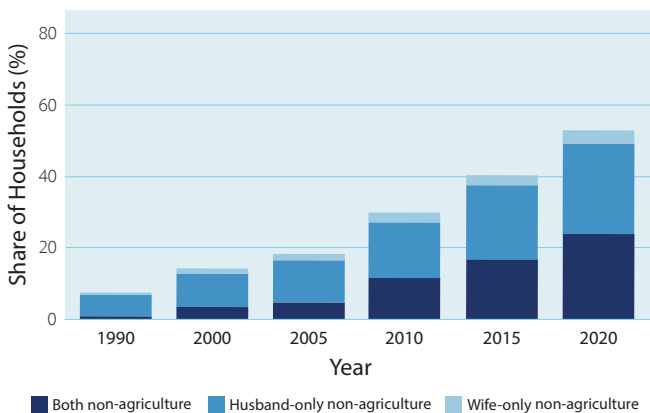
Our main argument is that the combination of land market frictions and perceived gender roles contributes to a higher share of women in agricultural employment compared to men in developing countries. The objective of our paper is to empirically identify this relationship and utilize a quantitative macro model that incorporates intra-household migration decisions to measure its impact.



China’s land policy tied to the *Hukou* system provides a unique institutional context for directly studying the impact of such mobility constraints. The system classifies citizens as either non-agricultural or agriculture hukou. Those with agricultural Hukou are entitled to farm government-allocated land rent-free, but risk losing this land if they do not cultivate it---“use-it-or-lose-it”.

**Sectoral Employment Patterns of Rural Households**

**Figure 1. Employment Pattern of Rural Married Households**



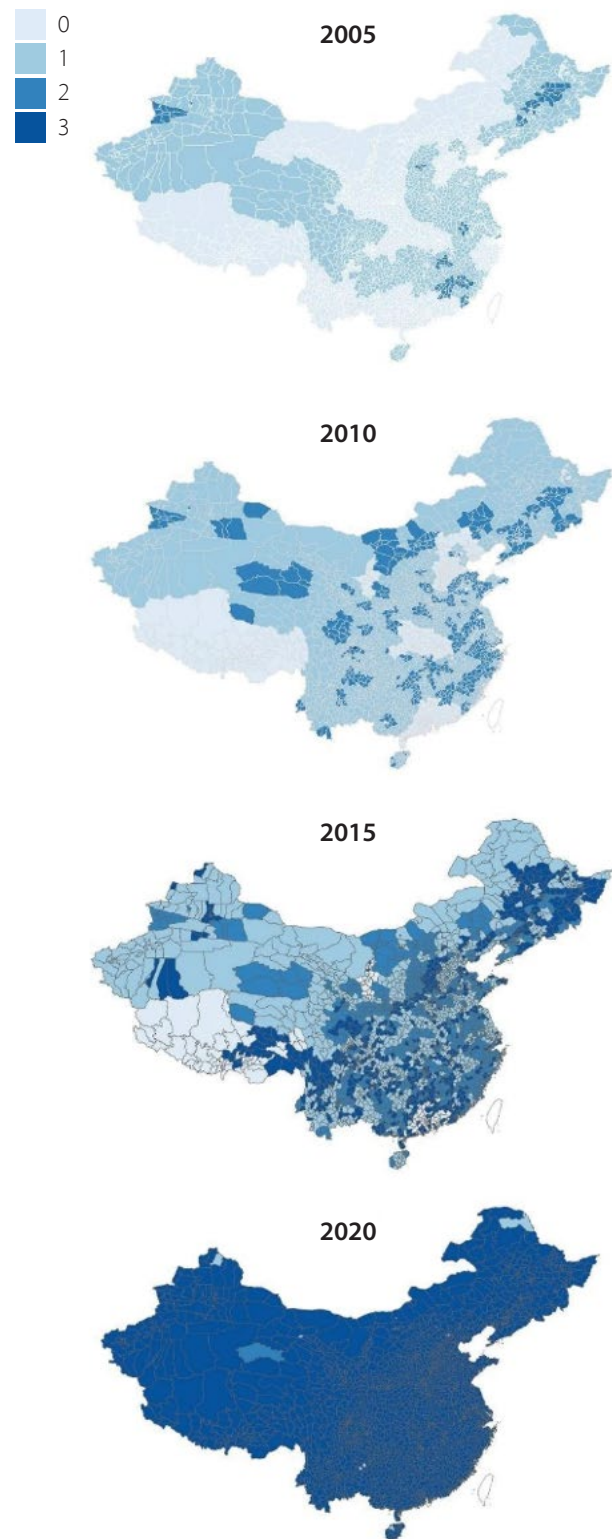
*Notes:* Census. Pairs of rural husbands and wives aged 18–55. “Both non-agriculture” denotes that both the husband and wife are employed in non-agricultural sectors. “Husband-only non-agriculture” denotes that husbands work in non-agriculture and wives do not. “Wife-only non-agriculture” denotes that wives work in non-agriculture while husbands do not.

Figure 1 shows that, among rural married households, women are less likely than men to be employed in the non-agricultural sector. It is only after 2005 that a noticeable upward trend emerges in the proportion of both spouses working outside agriculture. This shift aligns with two major land reforms implemented between 2003 and 2019, suggesting that land tenure insecurity prior to these reforms may have constrained labor mobility—particularly for rural women engaged in so-called “guard labor.”

**Land Reforms Roll-out**

The land contracting reform (initiated in 2003) and the land titling reform (launched in 2009) aim to safeguard agricultural households’ rights to lease and rent farmland. Combining keyword filter and large language model (LLM) validation, we extract more than 4,400 land reform documents from over 3 million government documents. We then construct a comprehensive and granular county-level reform index that traces the geographical and temporal diffusion of both reforms (Figure 2). This index provides a direct measure of how mobility barriers have evolved over time.

**Figure 2.**



*Notes:* This figure matched the county-level land reform index with the 2010 Chinese prefecture-level GIS map. Darker colors represent a higher Land Reform Index. The reform index takes four potential values: 0 (No reform), 1 (Provincial regulations on land contracting reform issued), 2 (Prefecture/county regulations on land contracting reform also issued, in addition to provincial regulations), and 3 (Land titling reform completed).



## Impacts of Land Reforms

Using this newly developed index and high-quality micro data sets of individuals and households over the last two decades, we first assess whether land reforms have led to significant improvements in land tenure security. More importantly, we analyze how these reforms have affected labor market outcomes by gender—for both rural agricultural and urban non-agricultural *Hukou* holders.

## ASSESSMENT

Empirically, land reforms have significantly increased rental activities, signaling improved rental rights security. This change has especially impacted rural women with agricultural *Hukou*. These women are now leaving farming at higher rates than rural men and are increasingly working alongside their spouses in non-farm jobs. The reforms have helped free up “guard labor”—mostly women who were previously constrained by the interaction of land market distortions and gender roles in both market and home production, thereby reducing gender-specific mobility barriers.

For individuals with non-agricultural *Hukou*, the reforms have led to a decline in women’s employment and wages compared to men, particularly among women with lower levels of education. This may be because more rural women are migrating to cities, increasing competition for low-skilled type of jobs—what economists call a “substitution effect.”

By using a land reform index to measure the reduction in barriers to labor mobility, our quantitative macro model explains:

- The increase in couples working together in non-farm jobs (especially more women entering non-agricultural work)
- About one-third of the decline in the urban gender wage gap
- Around half of the narrowing productivity gap between farming and non-farming sectors from 2000 to 2020.

## RECOMMENDATION AND CONTRIBUTION TO LITERATURE

This work contributes to a growing literature on mobility barriers, structural transformation, gender, and labor dynamics in developing countries. Our key finding is that gender-neutral policies may create gender-specific mobility barriers through delicate intra-household decision-making. By treating land policy as both a barrier and a lever for reform, it opens new pathways for rethinking inclusive growth. As policymakers continue to tackle inequality and rural-urban divides, China’s experience offers a compelling case to consider the uneven impacts of land reforms.

### Reference:

Ting Chen, Jiajia Gu, L. Rachel Ngai and Jin Wang,  
“Sowing Seeds of Mobility: The Uneven Impact of  
Land Reform”, *CEPR DP20360, STEG WP119, 2025*.



**Jin Wang** is an Associate Professor of Social Science and Faculty Associate at HKUST's Institute for Emerging Market Studies. She holds a BA/MA in Economics from Tsinghua and a PhD from LSE. Her research explores place-based policies, organizational incentives, labor mobility barriers, and environmental regulation. Her work is published in leading journals and cited by major international organizations.

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T: (852) 3469 2215  
E: [iems@ust.hk](mailto:iems@ust.hk)  
W: <http://iems.ust.hk>  
A: Lo Ka Chung Building, The Hong Kong University  
of Science and Technology, Clear Water Bay, Kowloon