



USAID
FROM THE AMERICAN PEOPLE



BRIEF: LEVERAGING FORMAL LAND RIGHTS FOR CREDIT ACCESS

This brief distills key information from the [Leveraging Formal Land Rights for Credit Access](#) report developed under the USAID Communications, Evidence and Learning (CEL) project. It seeks to shed light on an enduring development question—if formalization of rural land rights does not significantly unlock formal credit through collateralizing land, particularly in Sub-Saharan Africa as theorized, are there alternative mechanisms by which formalization can improve credit access? After reviewing evidence for the collateral pathway, the brief summarizes emerging evidence on three alternative pathways and outlines evidence gaps to close and steps tenure programs can take to create an enabling environment for the pathways to function.

There is widespread agreement among researchers and practitioners that access to finance for small farmers and entrepreneurs makes essential contributions to poverty reduction and economic development. Lack of credit can lead to poverty traps, whereby households are unable to save enough to finance productive investments, and poverty becomes a self-perpetuating cycle (Demirgüç-Kunt, Beck, and Honahan 2008). Though the expansion of microcredit in recent years has resulted in significant progress, the World Bank estimates that 1.7 billion people around the world remain “unbanked,” without access to formal financial services (Demirgüç-Kunt et. al. 2017).

One of the hypothesized pathways from formalization of land rights to economic benefits is through improved credit access for land holders. Formalizing and documenting property rights can enable owners to offer their property as collateral when seeking loans. Collateral reduces the risks to financial institutions in event of default, and thus can increase their willingness to lend. Access to credit allows land users to make investments in their land such as improving soil fertility, or investing in irrigation, high quality seeds, or long-term crops and trees, all of which can contribute to increased productivity thereby improving economic benefits for smallholders. While these relationships are not necessarily linear, the ability for smallholders to invest in their land depends largely on their ability to raise capital, whether from formal or informal sources (Lisher 2019).

RESEARCH PROCESS AND LIMITATIONS

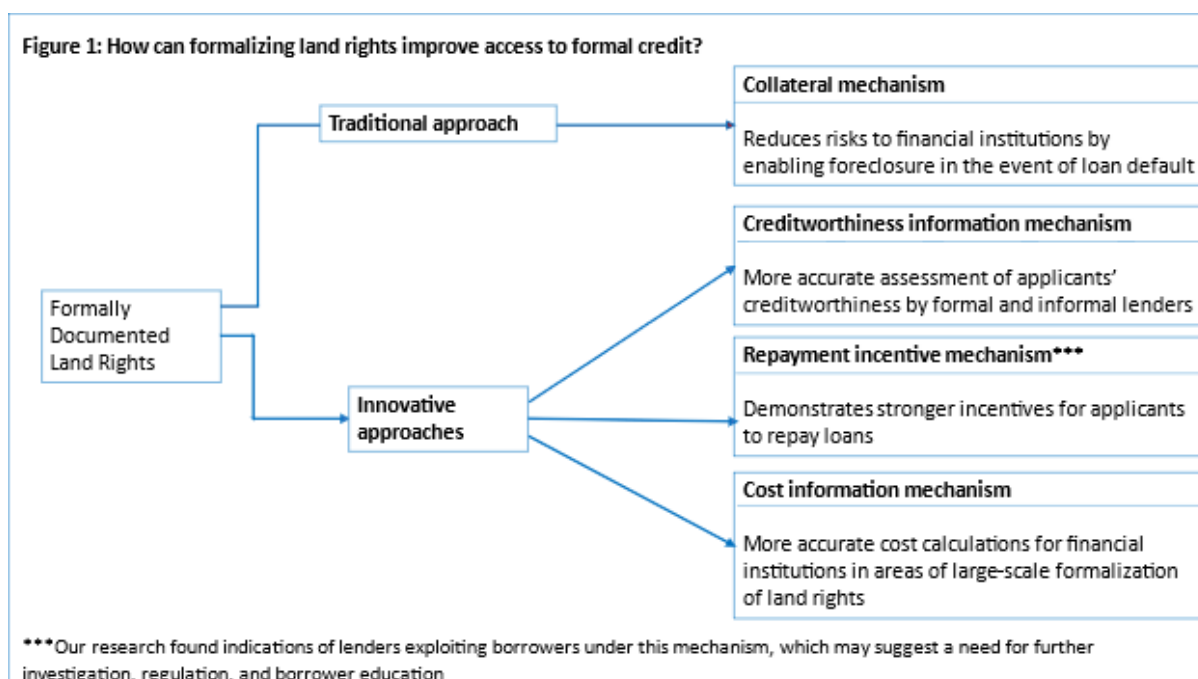
To understand the available evidence on use of land documents as collateral for credit and alternative pathways for land documentation to facilitate access to credit, we began with a review of the existing academic and evaluation literature. The review identified a wide range of literature on the use of land documents as collateral pathway and approximately 25 studies that have explored or found evidence of alternative pathways of credit access, covering a wide range of geographic and programmatic contexts. Given the limited scope of the literature on alternative pathways and our focus on identifying examples and potential explanations, we did not apply systematic criteria to include papers but kept all relevant papers to be able to draw upon a wide range of cases.

We supplemented the literature review with a small primary data collection exercise, conducting key informant interviews with 21 program and microfinance professionals with direct experience in one or more of the alternative pathways.

The research aimed to identify alternative pathways, how they may operate, and how they could inform future program design. The existing evidence base is too thin to examine pathways' efficacy in improving credit access. The research focuses on formal and semi-formal credit such as loans provided by banking institutions, credit bureaus, microfinance institutions, donor-funded programs, and cooperatives and are subject to government regulations. We acknowledge that a majority of low-income rural dwellers borrow regularly from informal credit sources.

FOUR PATHWAYS

Figure 1 illustrates four pathways through which land formalization can help landholders access credit—the familiar pathway whereby formalizing land leads to credit using land as collateral, and three alternative pathways that emerged in this research: 1) land documentation may improve lenders' ability to assess borrower's creditworthiness; 2) taking possession of a borrower's land document may incentivize borrowers to repay their loans; and 3) financial institutions can gather information from land documents or registries to assess potential costs of lending in new geographies or to new borrowers.



LAND AS COLLATERAL

Though not the primary focus of this research, the ability for potential borrowers to use formal documented land rights as collateral against a loan is a long-asserted and long-studied pathway. The rationale of the collateral pathway posits that holding formal rights allows a prospective borrower to offer the land (and potentially other assets on the land such as buildings or perennial crops) as collateral against the loan, thereby decreasing financial institutions' risks or affording more favorable terms for the borrower. If the borrower defaults, financial institutions can, in theory, partially or fully recoup the value of the loan by foreclosure and re-sale of the land (Besley 1995; Feder 1985; DeSoto 2000).

Evidence of the collateral pathway is mixed and indicates that certain socioeconomic and market contexts must be present for the pathway to function as expected. Evidence from Brazil, Thailand, and Vietnam found that households with formally documented land or housing rights were more likely to access credit in general and increased the amount of money borrowed through formal credit (e.g., commercial banks, government, or cooperatives) (Feder et al. 1988; Piza and de Moura 2016; Kemper et al. 2011). However, the collateral pathway appears more accessible to wealthier households (Boucher et al. 2005; Carter and Olinto 2003; Jiang et al. 2020; Zhang et al. 2020).

Several empirical studies have observed no or weak links between formalized land rights and credit use, especially in sub-Saharan Africa. On the supply side, reasons put forward are that lenders may be wary of using land as collateral due to high transactions costs of foreclosure and resale, and the social unacceptability of repossession of land. On the demand side, potential borrowers may not want to risk loss of their land in the event of default because land is often their most valuable asset, a source of income, residence, and a source of social and cultural connection. (Boucher et al. 2005; Boudreaux 2008; Castañeda Dower and Potamites 2012; Field and Torero 2006; Gilbert 2002, 2012; Higgins et al 2018; Hooper-Box 2002; Kerkes and Williamson 2010; Lawry 2014; Panaritis and Kostopoulos 2010; Sanjak 2012; Woodruff 2001).

FORMAL DOCUMENTS AS INDICATORS OF CREDITWORTHINESS

Formal land documents can also provide useful information to financial institutions about a potential borrower's long-term presence in the community, landholdings, reliability, and stability as indications that a borrower can repay a loan and potentially seek future financing.

Among the alternative pathways, the indicator of creditworthiness pathway is the most frequently documented in the literature. In Ethiopia, the Land Investment for Transformation (LIFT) program worked with micro-finance institutions (MFIs) to create a new individual loan product linked to second-level land certificates (SLLCs). While SLLCs are required to access the loans, the MFIs use SLLC information about ownership and landholding size to assess creditworthiness of borrowers. The produce of the land or land use rights serve as the loan guarantee (lender can temporarily rent out land in case of default). These SLLC-linked loans provide more favorable terms for borrowers compared with group-lending through MFIs, allowing individuals to borrow more (EBT 5,000-50,000 compared with EBT 3,000-5,000 through group lending) and at lower rates (15-18 percent compared with up to 21 percent through group lending) (DAI 2017). A majority of borrowers invested loans in more productive cropping and animal husbandry practices.

Similarly, land documentation led to more favorable loan terms in Indonesia and Peru. An earlier empirical study from Indonesia found that just having a land title increased loan size by 22 percent on average and offering the land title as security increased loan size by 30 percent on average

(Castañeda Dower and Potamites 2012). In Peru, a survey of more than 1,700 randomly sampled households found having a land title resulted in an average 12 percent higher loan amount and an average 9 percent lower interest rate (Field and Torrero 2006).

Several key informant interview respondents in our research, who worked across seven different MFIs or cooperatives in India and Myanmar, also indicated that their institutions used formal land documents to assess potential borrowers' creditworthiness, without any arrangement to use the land or the document as collateral. Particularly for agricultural loans, institutions used information about land size and quality, in addition to confirming ownership, to assess whether the land can support the production for which the loan was intended.

Financial institutions' use of formal land documents to assess creditworthiness may benefit women less than men. Women's names are less likely to be on land documents. If formalization does not take steps to register land in women's names through joint titling efforts or other gender-responsive approaches to land formalization, women may entirely lose the opportunity to access credit through pathways linked to land documentation. Additionally, there are well-documented challenges with gender discriminatory cultures in banks and other formal financial institutions that make it more difficult for women to meet creditworthiness criteria or receive equitable terms for loans (Fletschner 2008; Acquah et al. 2003; Aristei and Gallo 2021). USAID's Integrated Land and Resource Governance (ILRG) activity's Zambia work is making good strides to address these challenges by pairing gender-sensitive land titling with a company partnership to provide village savings and loans products, focusing on women and partially based on land documentation information (Tetra Tech 2020).

HOLDING DOCUMENTS FOR REPAYMENT INCENTIVE

The rationale behind this pathway is that a lender taking physical possession of a borrower's land title or certificate either creates incentive for the borrowers to repay the loan or screens in borrowers with a greater ability to repay the loan. However, a bank's physical possession of the land document could create problems for the borrower if, for example, the borrower needs the document to update their land records, sell or lease their land, or provide proof of identity for receiving agricultural subsidies or other services. The borrower would either need to re-take physical possession of the certificate or obtain another copy, both of which can incur financial and logistical costs. The borrower's rights and access to their land do not change, but the ease with which they can exercise and leverage them does.

Spotlight: Ethiopia LIFT

MFIs used land certificates to determine borrowers' **creditworthiness**. Land use rights backed by the document or agricultural produce from the land served as the loan guarantee.

In addition to one of LIFT's main aims of creating an up-to-date digitized land registry, to enable the leveraging of land certificates to access credit LIFT

- collaborated with MFIs to develop loan products suitable for smallholder farmers
- supported policy and regulatory reform that allowed lenders to accept land certificates as guarantees
- promoted requirements for spouses to sign loans that leveraged the land certificate.

Through LIFT, more than 13,000 loans disbursed, with a value of over 11 million GBP. A majority of borrowers had not received formal loans before. Women were one-third of recipients and reported increases in joint decision-making, including financial decisions.

Land Investment for Transformation Programme (2019). Increasing productivity through an innovative, individual-based agricultural loan. *Research Summary May 2019.*

Our research found several examples of this pathway in practice, especially among informal lending groups, rural MFIs and agricultural cooperatives. For example, in Ethiopia anecdotal evidence suggests the emergence of group-lending practices that require members to place their land certificate to be held by the group as a repayment incentive (Persha et al. 2017). However, the current lack of systemic study of this pathway prevents us from gauging the prevalence of holding land certification documents as repayment incentive by informal lending groups, MFIs or cooperatives, or the contexts where it is more common.

This pathway should be treated with caution. Situations wherein lenders falsely use the threat of dispossession as incentive or retain documents illegally make this pathway potentially exploitative, especially if borrowers incorrectly believe (or cannot act against) the threat of foreclosure or cannot easily access replacement documents. Multiple key informants who worked in lending institutions in India explained that their institutions held borrowers' land titles to play on their fears of losing their land if they defaulted, although the institution had no intention of foreclosing. Emerging civil society and academic reporting from Cambodia, Timor-Leste, and Guatemala indicates that use of land documents as collateral for MFI loans has led to land loss as borrowers are pressured to sell land to repay their debt (Hayward 2022). That this dynamic is occurring in MFIs and cooperatives is especially concerning because these institutions often emphasize lending to people with low incomes, people with little education, and women, all of whom may have insufficient understanding of their land rights and limited power to exercise them. Several countries have passed laws to regulate MFIs that use predatory lending practices including preventing MFIs from holding documents, seizing land and other assets and selling them illegally to recover loans, and making visits to borrowers' homes to threaten them, etc. (Green 2020; Butcher and Galbraith 2019; Saad 2104; Coetzee et al 2005).

LOWER INFORMATION COSTS FOR LENDERS

Finally, the information captured in formal land documents may provide details that lower costs for lenders or help them assess the viability of providing financial products and services in new geographies or to new kinds of customers. The ability to use formal land documents to verify individual potential borrowers' identity, location, land rights, land holdings, and existing loans may reduce lenders' costs of obtaining this information through other channels or better assess the viability of entering new markets or offering tailored financial products.

Despite the intuitiveness of this pathway, we found no empirical research on lenders' use of land documents (including cadasters and registry records) to assess or reduce their costs. However, key informant interviews with the USAID ILRG Activity in Zambia illustrates one way the pathway can unfold. ILRG provided information from parcel-level customary land certificates to a local MFI, allowing the MFI to assess startup costs of entering new geographical markets, inform where they placed their agents, and verify applicants' identity and residency requirements for eligibility for credit. Prior to using the administrative information from land certificates, the MFI relied on signed letters from traditional leaders to vouch for the residency of potential borrowers. As of 2020, supported by a small grant from ILRG, the MFI engaged with more than 1,000 rural women to increase their access to financial services. Although the MFI was enthusiastic about continuing to use administrative data, it did not provide estimates of the cost savings from using this information.

Where governments are investing in systematic land regularization or strengthening land administration systems, there is potential to design assessment and programs to generate much-needed evidence on the presence of this pathway and the potential to leverage it. Efforts would need to engage administrative officials, financial institutions, and women and men to determine the

information that is relevant for and could be made available to financial institutions without violating privacy. As in all pathways, whether formal land documents recognize women as owners or rightsholders will affect women's visibility to financial systems and women's access to formal credit.

Spotlight: Feed the Future Tanzania Land Tenure Assistance Activity (LTA)

Information on Certificates of Customary Rights of Occupancy (CCROs) about land parcels' size and location allowed banks to better assess the value of applicants' land that banks were lending against.

Banks accepted **CCROs as collateral**, for loans. Some banks loaned to groups of smallholders with CCROs who collectively met the required 50-hectare threshold for lending against a CCRO, expanding credit access to smallholders at substantially lower interest rates than MFIs. In one year, eight financial institutions lent around 26 million dollars with CCROs provided as collateral.

LTA used **complementary approaches** to support supply of and demand for credit

- negotiated lower costs to register mortgages and transactions,
- established a system to post-registration transactions and mortgages, and
- experimented with a loan guarantee to bank to encourage agricultural loans to women and youth.

Chief of Party, Feed the Future Land Tenure Assistance Activity, Tanzania. Key informant interview.

INFORMATION GAPS TO CLOSE

This brief and the associated full report provide an overview of the nascent evidence on alternative pathways for leveraging formal land rights to access credit. Before incorporating these alternative pathways into program design at scale or relying on them for impact, more research is needed to understand how each of the alternative pathways works, for whom, under what conditions, and the size of their impacts on credit access. There are three dimensions of evidence to build to solidify a theory of change for and understand the feasibility of the alternative pathways.

1. **ASSESS THE EXTENT TO WHICH COUNTRIES' LEGAL FRAMEWORKS ACCOMMODATE EACH OF THE ALTERNATIVE PATHWAYS:** As noted in the LIFT example, changes to the legal framework were required in Ethiopia to clarify the legality of using SLLCs to secure loans. Similarly, ILRG in Zambia noted ambiguity in the legal framework about what information customary land certificates must contain to be deemed legal (e.g., recognized by courts), which could affect financial institutions' willingness to accept them as loan documentation. It would be valuable to undertake an assessment of legal frameworks to understand any potential barriers before promoting or pursuing alternative pathways.
2. **IDENTIFY CONDITIONS UNDER WHICH LAND DOCUMENTS ARE BENEFICIAL FOR FINANCIAL INSTITUTIONS TO ASSESS CREDITWORTHINESS OR LOWER INFORMATION COSTS:** The information available through this research did not provide sufficient detail to understand which financial institutions are receptive to using land documentation to access credit and under what conditions. It would also be useful to better understand: what information provided on land documents influences lenders' assessment of creditworthiness or reduces their costs; what information is most valuable to financial institutions; how land documents compare with other sources of information (in terms of accuracy, completeness, ease of use, inclusion of

gendered and secondary rights); and degree of risk reduction from for financial institutions and the degree of expansion of loans to rural smallholders without direct donor support.

- 3. IDENTIFY CHARACTERISTICS OF SUCCESSFUL BORROWERS UNDER THE ALTERNATIVE PATHWAYS:** It is important to understand how agricultural market conditions and financial literacy of local populations influence the demand for and the viability of the alternative pathways. It will also be important to identify the characteristics of borrowers for whom the alternative pathways work well, including gender and marital status, age, size of holding, and other socioeconomic characteristics.

RECOMMENDATIONS FOR PROGRAMMING

In addition to closing evidence gaps, USAID and other development partners can take the following steps to learn about and create opportunities for the alternative pathways to enable land formalization to increase equitable access to credit products that meet rural women and men smallholders' needs.

- 1. ASSESS CREDIT ACCESS AS PART OF LAND FORMALIZATION PROGRAMS:** Formalization programs can assess the gendered supply and demand of credit for rural smallholders, closely monitor and evaluate gendered credit impacts of formalization, and actively share findings. This information will be important to gauge the appropriateness and effectiveness of the pathways before investing in programming at scale.
- 2. LINK LAND FORMALIZATION AND FINANCIAL SERVICES INTERVENTIONS:** USAID and other development partners can design programs that intentionally link land formalization and financial services approaches to increase access to credit along the alternative pathways. This would entail building assessment of the financial sector's information needs into early stages of land formalization programs and determining whether lenders are able and willing to provide appropriate agricultural sector loan products using land documentation. Programs should take care to respect the privacy of certificate holders or participants in land formalization programs and to limiting sharing information to what is publicly available or legally allowed.

Examples of programmatic linkages projects have successfully implemented include

- Connecting land certificate holders to financial institutions.
 - Collaborating with financial institutions to create non-collateralizable loans and non-cash loans for seeds and other agricultural inputs which would be less risky for smallholders.
 - Subsidizing mortgage registration costs to ensure smaller loans that benefit the poor are attractive to lenders.
 - Targeting these complementary measures towards women, low income, or other groups who face additional barriers to credit access.
- 3. TAKE SPECIFIC STEPS TO ENSURE LAND RIGHTS PROTECTIONS AND ACCESS TO CREDIT FOR WOMEN AND OTHER MARGINALIZED GROUPS:** At a minimum, land formalization programs should support documentation of land rights in women's names so they have formalized rights as an entry point to accessing credit and other services. Combine this with financial products and services that allow women, tenants, and others with secondary land rights or smaller landholdings to access credit. Linking village savings and loan associations to MFIs can help provide creditworthiness information to MFIs, and helps to address the exclusion of women, tenants, secondary users of land, and landless

people who may otherwise not be able to access credit if only land tenure information was used. Requiring spousal approval to use land as collateral can help ensure that husbands and wives are both aware of associated risks and benefits.

4. **ASSESS AND PROMOTE FINANCIAL LITERACY AMONG RURAL POPULATIONS, ESPECIALLY WOMEN:** Formalization can generate credit impacts more effectively when borrowers are well-informed about the availability of loans, how to apply for them, and relevant laws and procedures. Where significant knowledge gaps exist, addressing those in parallel to formalization can spur demand for credit and reduce risks associated with predatory lending.

5. **PILOT ALTERNATIVE COLLATERAL MODELS THAT AVOID RISKS OF PERMANENT DISPOSSESSION AND LANDLESSNESS:** For low-income households, land is often their most valuable asset and—apart from their own labor—the one they rely most on for generating income. Losing land as a result of default on a loan can easily render a poor family destitute. Models should be piloted and evaluated that allow borrowers to use land documents to secure loans without the risk of land loss. Options can include providing lenders with temporary use rights in the event of default, or the ability to apply a lien to a borrower's property. Consideration should be given to supporting conditions for these models to work, like land rental markets and land information systems that capture loan or lien information. In addition, access to other financial products such as savings and insurance can help borrowers reduce the risk of default and potential foreclosure.

6. **MONITOR FOR, PREVENT, AND RESPOND TO POTENTIAL EXPLOITATION AND NEGATIVE IMPACTS:** Land formalization and financial services programming should fully integrate a gender equality and social inclusion approach, with deliberate actions to protect land rights of and mitigate risks for women, smallholders, tenants, secondary rights holders, and Indigenous persons, and landless people.

SUGGESTED CITATION FOR FULL REPORT

Knox, A., Louis, E., and Linkow, B. Leveraging Formal Land Rights for Credit Access. (2021). Washington, DC: USAID Communications, Evidence and Learning (CEL) Project

USAID Contract Number: GS00F061GA / 7200AA18M00006

REFERENCES

- Acquah, P.K., Acheampong, I.K. and Annim, S.K. (2003), Women entrepreneurs in the informal sector and their interest in accessing formal institutional credit: A study of some women entrepreneurs in two districts of the Central Region of Ghana, unpublished, University of Cape Coast, Cape Coast
- Aristei, D. and Gallo, M. (2021), Are female-led firms disadvantaged in accessing bank credit? Evidence from transition economies, *International Journal of Emerging Markets*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJOEM-03-2020-0286>
- Besley, T. (1995). Property rights and investment incentives: Theory and evidence from Ghana. *Journal of Political Economy*, 103(5), 903-937. https://rpd.princeton.edu/sites/rpd/files/media/besley_property_rights_and_investment_incentives_jpe1995.pdf
- Boucher, S. R., Barham, B. L., & Carter, M. R. (2005). The impact of “market-friendly” reforms on credit and land markets in Honduras and Nicaragua. *World Development*, 33(1), 107-128. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.892.6327&rep=rep1&type=pdf>
- Boudreaux, K. C. (2008). The legal empowerment of the poor: titling and poverty alleviation in post-apartheid South Africa. *Hastings Race & Poverty LJ*, 5, 309.
- Butcher, W. & Galbraith, J. (2019) Microfinance Control Fraud in Latin America, *Forum for Social Economics*, 48:1, 98-120, DOI: [10.1080/07360932.2015.1056203](https://doi.org/10.1080/07360932.2015.1056203)
- Carter, M. R., & Olinto, P. (2003). Getting institutions “right” for whom? Credit constraints and the impact of property rights on the quantity and composition of investment. *American Journal of Agricultural Economics*, 85(1), 173-186. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.372.9469&rep=rep1&type=pdf>
- Castañeda Dower, P. and E. Potamites (2012). Signaling Credit-Worthiness: Land Titles, Banking Practices and Formal Credit in Indonesia <http://www.cefir.ru/papers/WPI186.pdf>
- Coetzee, G. K., Druschel, K. A., Cook, L. D., Brislin, N. W., Meagher, J. P., & Pearson, R. V. (2005). The Evolution of the South African Microfinance Sector from 1992 to 2004: The Role of the Microfinance Regulatory Council. IRIS Centre of the University Research Corporation International, 1-108.
- DAI. (2017). Promoting financial inclusion: Developing an innovative SLLC-linked loan product. Land Investment for Transformation (LIFT), Economic Empowerment Unit Brief. <https://landportal.org/library/resources/promoting-financial-inclusion-developing-innovative-sllc-linked-loan-product>
- de Soto, Hernando. (2000). *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Demirgüç-Kunt, A., Beck, T., & Honahan, P. (2008), *Finance for All? A World Bank Policy Research Report*. Washington: The World Bank.
- Demirgüç-Kunt, A, L. Klapper, D. Singer, S. Ansar, J. Hess (2017). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington: The World Bank
- Feder, G. (1985). The Relation Between Farm Size and Farm Productivity: The Role Of Family Labor, Supervision And Credit Constraints. *Journal of Development Economics*, 18(2-3), 297-313.
- Feder, G., T. Onchan, and T. Raparla, (1988). Collateral Guarantees And Rural Credit In Developing Countries: Evidence from Asia. *Agricultural Economics*, 2, 231-245.
- Field, E. & M. Torero (2006). Do Property Titles Increase Credit Access Among the Urban Poor? Evidence from a Nationwide Titling Program. Working paper, Department of Economics, Harvard University, Cambridge, MA. Accessed at: <https://scholar.harvard.edu/files/field/files/fieldtorerocs.pdf>
- Fletschner, D. (2008). Women’s access to credit: does it matter for allocative efficiency? *American Journal of Agricultural Economics* 90 (3), 669-683.
- Gilbert, A. (2002). On the mystery of capital and the myths of Hernando de Soto: what difference does legal title make? *International Development Planning Review*, 24(1), 1-19. <http://www.bdsknowledge.org/dyn/be/docs/63/CritiqueofDeSoto.pdf>

- Gilbert, A. (2012). De Soto's The Mystery of Capital: reflections on the book's public impact. *International Development Planning Review*, 34(3), v-xviii. https://www.researchgate.net/profile/Alan_Gilbert/publication/279207595_De_Soto%27s_The_Mystery_of_Capital_reflections_on_the_book%27s_public_impact/links/568e50d208aef987e567ab1e/De-Sotos-The-Mystery-of-Capital-reflections-on-the-books-public-impact.pdf
- Green, W. N. (2020). Regulating Over-indebtedness: Local State Power in Cambodia's Microfinance Market. *Development and Change*, 51(6), 1429-1453.
- Hayward, Daniel (2022). The link between microfinance and land loss. *Land Portal Country Insights Digest*, 4. <https://landportal.org/blog-post/2022/02/link-between-microfinance-and-land-loss-country-insights-digest-4-february-2022###5>
- Higgins, D., Balint, T., Liversage, H., & Winters, P. (2018). Investigating the impacts of increased rural land tenure security: A systematic review of the evidence. *Journal of Rural Studies*, 61, 34–62.
- Hooper-Box (2002). Low-Cost Homes Leave Banks Rlbn in the Red, IOL (Cape Town, South Africa), Aug. 17, 2002. <https://www.iol.co.za/news/south-africa/low-cost-homes-leave-banks-rlbn-in-the-red-91575>
- Jiang, M., Paudel, K. P., Peng, D., & Mi, Y. (2020). Financial inclusion, land title and credit: evidence from China. *China Agricultural Economic Review*.
- Kemper, N., Klump, R., & Schumacher, H. (2011). Representation of property rights and credit market outcomes: Evidence from a land reform in Vietnam. https://www.econstor.eu/bitstream/10419/48333/1/45_kemper.pdf
- Kerekes and Williamson (2010). Propertyless in Peru, Even with a Government Land Title. http://www.claudiawilliamson.com/Claudia_Williamson/Research_files/Williamson%20Kerekes%20AJES%202010.pdf
- Lawry, Steve. (2014). The Impact of Land Property Rights Interventions on Investment and Agricultural Productivity in Developing Countries: A Systematic Review. https://www.cifor.org/forestsasia/wp-content/uploads/2014/02/Lawry_Land_Property_Rights_Review.pdf
- Lisher, Jennifer (2019). Guidelines for Impact Evaluation of Land Tenure and Governance Interventions. UN-HABITAT Report 02/2019
- Panaritis, E., & Kostopoulos, A. (2010). Guyana property rights study (No. publication-detail, 7101. html? id= 7788). Inter-American Development Bank. <https://pdfs.semanticscholar.org/0038/a470ac4e0203f6d494644ed45ddda4cd5639.pdf>
- Persha, L., A. Greif and H. Huntington (2017). Assessing the Impact of Second-Level Land Certification in Ethiopia. https://www.land-links.org/wp-content/uploads/2017/03/USAID_Land_Tenure_WB17_Assessing_Impact_Second-Level_Land_Certification_Ethiopia.pdf.
- Piza, C., & de Moura, M. J. S. B. (2016). The effect of a land titling programme on households' access to credit. *Journal of Development Effectiveness*, 8(1), 129-155.
- Saad, S. A. (2014). Microfinance And Client Protection Under Existing Indian Legal Framework. *Intercontinental Journal of Finance Research Review* ISSN, 2321-0354.
- Sanjak, J. (2012). Land titling and credit access-understanding the reality. USAID Property Rights and Resource Governance Project CORs.
- Tetra Tech, (2020). Quarterly Report, January – March 2020. Washington, DC: USAID Integrated Land and Resource Governance Task Order under the Strengthening Tenure and Resource Rights II (STARR II) IDIQ. https://land-links.org/wp-content/uploads/2020/12/ILRG-Quarterly-Report-Jan-Mar-2020_approved-4-1.pdf
- Woodruff, C. (2001). Review of De Soto's The mystery of capital. *Journal of Economic Literature*, 39(4), 1215-1223. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jel.39.4.1215>
- Zhang, L., Cheng, W., Cheng, E., & Wu, B. (2020). Does land titling improve credit access? Quasi-experimental evidence from rural China. *Applied Economics*, 52(2), 227-241. <https://www.tandfonline.com/doi/abs/10.1080/00036846.2019.1644446>