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LEVERAGING FORMAL LAND RIGHTS FOR CREDIT ACCESS

USAID Communications, Evidence, and Learning (CEL) Project – Land and Resource Governance

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Leveraging Formal Land Rights for Credit Access Report

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LIST OF ACRONYMS

CCRO	Certificates of Customary Rights of Occupancy
ELAP	Ethiopia Land Administration Program
ETB	Ethiopian Birr (Currency of Ethiopia)
FAO	Food and Agriculture Organization
ILRG	Integrated Land and Resource Governance
KII	Key Informant Interview
LTA	Feed the Future Tanzania Land Tenure Assistance Activity
LIFT	Land Investment for Transformation
LUC	Land Use Certificate
MAST	Mobile Applications to Secure Tenure
MFI	Microfinance Institution
PACS	Primary Agriculture Cooperative Societies
PACTA	Access to Land Pilot Project (Proyecto Piloto de Acceso a Tierras)
SNNPR	Southern Nations, Nationalities, and Peoples' Region of Ethiopia
SLLC	Second-Level Land Certificate
VSLA	Village Savings and Loan Associations

CONTENTS

I. INTRODUCTION AND METHODOLOGY

Efforts by governments and donors to strengthen land rights by providing formal legal documentation to land users have a long history and continue to be common in many contexts. Both theory and evidence have identified several different channels by which formalizing land rights can result in economic benefits (Lisher 2019). These include strengthening incentives for land users to make investments on their land, reducing costs and risks associated with land conflicts resulting from weak definition or enforcement of rights, and enabling more efficient land distribution through land transactions.

One of the hypothesized pathways from formalization of land rights to economic benefits is through improved credit access for land users. The argument is that 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 increases their willingness to lend. This pathway received widespread attention as a result of the Peruvian economist Hernando de Soto's influential book The Mystery of Capital (2000). De Soto argued that formal property rights could catalyze development by unlocking the vast capital value of land and other assets held by the asset poor.

Evidence on the efficacy of the collateral mechanism in practice has been mixed. Formalization has been shown to have positive impacts on credit access by enabling collateral in some contexts. However, in other contexts formalizing land rights alone has been insufficient to enable land to be used as collateral or to overcome other barriers that constrain credit access, particularly for poorer landholders. One implication is that complementary programs or policies are needed to enable the collateral mechanism to work.

However, recently anecdotal evidence has begun to suggest that there may be alternative mechanisms whereby formalizing land rights can improve credit access, short of using land as collateral. Research findings and project-related anecdotal evidence identify a growing number of cases in which formalization has not enabled beneficiaries to use their land as collateral but has nonetheless led to improved credit outcomes. Some tentative explanations have been proposed, but to date there has not been an effort to bring this evidence together, and systematically identify what causal mechanisms are at work.

The research in this report is thus motivated by two related questions. First, what are the alternative mechanisms by which formalization can improve credit access? What do we know about these mechanisms in practice, and what are the implications for policy and programming? Secondly, what (if any) complementary programming and policy measures can help leverage these mechanisms to strengthen the impacts of formalization on access to credit, particularly for the poor? It is important to note that our intention is limited to identifying these mechanisms, how they may operate, and how they could inform future program design. We do not attempt to cover their efficacy as a means of improving credit access, as the evidence base on these mechanisms is too limited to draw conclusions from. This report and the evidence we review focuses on formal and semi-formal credit and the mechanisms through which land documents can improve access to formal and semi-formal credit. Formal and semi-formal credit includes 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. The World

Bank estimates that in developing countries about half the of those who took loans borrowed informally and primarily from families and friends (Demirguc-Kunt et al. 2017).

To address these questions, we combine a review and synthesis of the relevant literature with a set of Key Informant Interviews (KIIs) of development practitioners who have first-hand experience with these issues. Our objective is to identify lessons learned and provide actionable recommendations for policymakers and program designers to harness the benefits more fully to financial inclusion that can result from formalizing land rights.

Analysis seeks to understand how these alternative means work and under what circumstances, with the aim of informing future USAID programming so that formal land rights can be used to better facilitate access to financing by smallholders and the urban poor, especially women. Financial inclusion is in turn expected to result in improved investment, productivity, food security, and other welfare outcomes for those who are most vulnerable. Primary audiences for this research include USAID officers engaged in the design and oversight of programming on land tenure, agricultural development, food security, gender equity and women's empowerment, and economic growth, together with their corresponding implementing partners.

Our investigation of the relationship between formalizing land rights and access to credit combined two approaches. First, we conducted a review of the existing academic and evaluation literature. Our review identified a wide range of literature on the collateral mechanism, and approximately 25 studies that have explored or found evidence of alternative mechanisms of credit access in some way, covering a wide range of geographic and programmatic contexts[1].

While the literature review provides an important starting point, existing research has only begun to scratch the surface of these alternative links between formalization and credit. As a result, we supplemented the literature review with a small primary data collection exercise. Budget constraints and the COVID pandemic did not permit fieldwork or more extensive data collection, so we limited these efforts to a set of Key Informant Interviews (KIIs) with development practitioners who have first-hand experience with land programs in order to identify additional cases. In the case of programs and Micro-Finance Institutions (MFIs), where possible, we made use of key informant interviews with knowledgeable program staff. Identification of relevant programs relied on online research, including review of USAID's LandLinks website, as well as referrals from experienced land tenure professionals. When conducting key informant interviews, we utilized a key informant interview guide, one, for staff of development programs, and a slightly modified one for MFIs (see Annex 1). We spoke with a total of 21 key informants from six programs and eight MFIs spanning Asia, sub-Saharan Africa, and Latin America; in some cases, we spoke to two or more staff from the same program or MFI. All interviews were carried out remotely. A list of key informants from the six programs and the interview guides we used is presented in Annex A and B. MFI names and informants' identities from India and Myanmar are not disclosed for confidentiality reasons.

II. ACCESS TO CREDIT

[1] Given the limited scope of the literature and our focus on identifying examples and potential explanations, we did not apply systematic search criteria or assess the methodology of the papers in the review. Rather, the review includes all of the relevant papers we were able to identify, in order to give us the widest range of cases on which to draw.

Before considering links to formalization and credit access, it is useful to consider the issue of access to credit more broadly. There is widespread agreement among researchers and practitioners that access to finance for small farmers and entrepreneurs makes an essential contribution to poverty reduction and economic development. Loans can come from a variety of sources, including formally from commercial banks, government, or donor-funded programs, and informally from moneylenders or family members. When farmers and entrepreneurs are unable to access credit from these sources, they must rely on their own savings or sale of assets to finance investments to improve their productivity and livelihoods. Lack of credit can lead to poverty traps, whereby households are unable to save enough to finance productive investments, and thus poverty becomes a self-perpetuating cycle (Demirgüç-Kunt, Beck, and Honahan 2008). Though the expansion of microcredit programs 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). The analysis in this report focuses formal and semi-formal credit because land is not typically used as collateral for accessing credit informally[2].

To understand how access to credit can be addressed, Demirgüç-Kunt, Beck, and Honahan (2008) make a useful distinction between "access" and "use." In particular, they point out that lack of use of finance does not necessarily imply lack of access. Among the farmers and entrepreneurs who do not take out loans, some choose not to do so voluntarily. This may be due to lack of need, a lack of bankable investment opportunities that a loan could potentially finance, a desire to not risk using their property for collateral for fear of losing it in case of default, or for cultural or religious reasons. Policies or programs to extend credit to those who already have access are thus liable to be of very limited benefit.

Instead, policies and programs should target potential borrowers who would benefit from loans but are unable to obtain them. These potential borrowers are said to be "credit rationed." Credit rationing is often the result of market failures that result from imperfect information (Stiglitz and Weiss 1981). Such market failures arise when a potential borrower would be in a strong position to repay a loan, but they are unable to obtain one because of limited information on either the supply or demand side. On the supply side, the lender may lack sufficient information to be able to distinguish between good and bad credit risks among certain types of individual applicants. As a result, an applicant who is a good credit risk may be unable to demonstrate that to the Financial Institution (FI), and thus will be rejected along with the applicants who are bad credit risks. Alternatively, some areas are too remote for financial institutions to operate in, as the outreach needed to connect with potential customers may be too costly to make it financially viable. Thus, creditworthy borrowers in these areas may be unaware of how to obtain a loan and are credit rationed on the demand side as a result.

Credit rationing by banks for collateralizable credit has been shown to disproportionately affect women and other vulnerable groups (e.g. Fletschner 2008). Women borrowers may be subjected to outright discrimination on the part of lenders or face particular challenges in demonstrating their creditworthiness. For example, Acquah et al. (2003), found that women entrepreneurs in Ghana are largely excluded from accessing credit because of a discriminatory banking culture created by collateral requirements, bureaucratic loan application and disbursement procedures, and the time and resources necessary to visit banks to access loans. Aristei and Gallo (2021) found that female-led firms in emerging economies of Europe and Central Asia are more likely to face financing constraints than their male counterparts and are

2

discouraged from applying for credit. Female-led firms also face significantly higher interest rates when they receive loans.

Women may be less credit-rationed for non-collateralizable credit by rural banks and MFIs because these institutions tend to target women and rely on other forms of enforcement such as social collateral. However not all women benefit equally. Akudugu et al. (2009), found that credit supply to women by rural banks in Ghana to be quite high, with 44 percent of the banks' lending going to women. They found that education, application procedures, access to land, income level, farm size, membership to economic associations, savings, interest rates and distance to the lender are the socio-economic, technical, and institutional factors that influence women farmer's access to credit and women farmers decisions to access credit.

Finally, it is also important to bear in mind that extending credit is not always beneficial to the recipient. Borrowing can increase the vulnerability of borrowers and their households, particularly when loans require land as collateral. If borrowers lack access to insurance or safety nets, loans may be used to cope with emergencies rather than to make productive investments, leading to loss of land as a result. Similarly, in some cases FIs have used predatory lending practices to manipulate borrowers into taking ill-advised loans (Daniels 2004, Caplan 2014).

III. LAND RIGHTS FORMALIZATION AND ACCESS TO CREDIT: THE COLLATERAL MECHANISM

The most well-known and widely researched argument linking formal land rights and access to credit is that formal land titles can enable land and other assets to be used as collateral for loans. When a loan applicant can offer collateral, the loan has a lower risk to lenders, since if the borrower defaults the cost to the financial institution can be partially or fully recouped by foreclosure and re-sale of the collateral asset. As a result, collateral makes lenders more willing to offer loans, and thus expands access to credit for borrowers. But for this mechanism to work, foreclosure in the event of default must be feasible for lenders in practice. In the absence of legally defined and enforced land rights, foreclosure and re-sale of land is liable to be impossible. Thus, formalizing land rights can improve access to credit by making land (and potentially other assets that are fixed to the land, such as perennial crops or housing) an attractive collateral asset that borrowers can offer to lenders (Besley, 1995; Feder, 1985; De Soto, 2000).

Perhaps the most influential and controversial proponent of this argument is the Peruvian economist Hernando de Soto. In his book The Mystery of Capital (2000), de Soto argued that the poor in developing countries have accumulated small fortunes, but they are not able to unlock the capital from their assets because they lack formal titles. Linking the large informal economy of the poor to the formal economy by enabling the poor to leverage their assets would improve economic growth and poverty alleviation. While de Soto's ideas are not original, he made the economic case for formalization attractive, and his ideas were eagerly adopted and promoted by influential development banks, multilateral aid organizations, as well as governments of several countries which implemented land formalization programs. For many, formalization was seen as a "silver bullet" to invigorate capital markets and enable inclusion of the poor (Besley et al. 2012).

The argument popularized by de Soto became known as the “de Soto Effect” and has been tested by a number of scholars in various contexts. Their evidence is mixed on whether documented land rights improve the poor’s access to formal credit. Empirical studies supporting the use of titles or other forms of tenure documentation as security for loans include Feder et al. (1988), who compared the borrowing of titled and untitled households in four provinces of Thailand and found that access to institutional credit (including cooperatives, specialized government agencies, state-owned banks, and private banks) was significantly expanded by the provision of land collateral. Commercial bank loans in almost all cases required land as collateral. Similarly, Piza and de Moura (2016) found that formalization in Brazilian urban squatter settlements led to increases in credit use overall, increased borrowing from commercial banks, and decreased reliance on informal credit. For titled households, credit from commercial banks increased threefold. A study by Kemper et al (2011) suggests a dramatic impact in Vietnam. Between 1993 and 2004 the share of households possessing Land Use Certificates increased from roughly 6 to 72 percent, and the share of formal loans in household borrowing increased from less than 30 to almost 65 percent.

In contrast, many other studies have failed to find a link between formalization and access to credit through collateral and questioned the efficacy of the collateral mechanisms. Several of these studies have argued that in practice, other barriers to credit access often prevent formalization from enabling land to be used as collateral, particularly for smallholders (Higgins et al 2018; Sanjak 2012; Woodruff 2001; Gilbert 2002, 2012). The non-tenure barriers that the poor face include supply side and demand side constraints. On the supply side, formal lenders are often unwilling to accept collateral under a certain minimum value because of the transaction costs associated with evaluating creditworthiness and management of the loan, including foreclosure and resale in the event of a default (Boucher et al., 2005; Field and Torero, 2006, Kerkes and Williamson, 2010; Lawry 2014). Social and cultural norms regarding repossession of land even if the law allows it can also present obstacles to foreclosure and resale. In Peru for example, repossession of government formalized land is a politically sensitive issue and banks are unwilling to foreclose even if they can, similar observations were made in Indonesia and South Africa (Kerkes and Williamson 2010; Dower and Potamites 2012; Hooper-Box 2002; Boudreaux 2008). In Guyana, Panaritis and Kostopoulos (2010) found that the legal process of foreclosures can be complex and costly for banks in the event of default, while Castaneda Dower and Potamites (2012) found that even the cost of registering collateral can act as a disincentive for formal lenders. On the demand side, even when land poor households may have enough collateral to qualify for a loan, they are often unwilling to take the risk of collateral loss in the event that circumstances render them unable to repay their loan. This risk is exacerbated for potential borrowers who face variable and uncertain income streams, such as those working in the informal sector or rely on agriculture for survival. These potential borrowers also typically lack access to insurance for crops or assets, which could help them mitigate this risk (Boucher et al 2005; Shakhovskoy and Mehta 2018). The existing empirical literature suggests that the constraints on collateralization of land are particularly strong in sub-Saharan Africa, as none of the studies that find a positive relationship between formalization of land and access to formal credit are set there.

Even where formalization does enable the use of land as collateral, several studies have found that credit access improves mainly or exclusively for better-off households. For example, in Eastern Paraguay, Carter and Olinto (2003) used a panel dataset of 300 households in three regions to understand the investment demand and credit supply effects of documented land. They found that although de mand for credit was widespread, the credit supply effects of secure tenure accrued to households whose landholdings exceeded 15 hectares and were non-existent for households with smaller landholdings. Similarly, a study of Honduras and Nicaragua by

Boucher et. al. (2005) found that the credit benefits of tenure reforms largely accrued to wealthier households, and formal credit remained strongly skewed against low-wealth households. For example, only two percent of the lowest wealth quintile in the Honduras sample received formal loans when compared to nineteen percent for the two quintiles above. In Nicaragua very few of the lowest three wealth quintiles of the sample received formal loans (1.9%, 1.4% and 3.3 % respectively), when compared to the fourth and fifth quintile (4.7% and 13.6% respectively). In the lowest quintile almost 60 percent in Honduras and 80 percent in Nicaragua report that they wanted a loan but did not receive one either because they did not meet minimum collateral thresholds or lacked sufficient insurance to protect them in case of default (non-price rationed). In the 2 quintiles above 41% in Honduras and 68% in Nicaragua reported being non-price rationed. Two recent studies from China (Zhang 2020 and Jiang et. al. 2020) both find that land titling increased access to formal credit for wealthier households, but not poorer ones. The authors argue therefore that land title by itself does not appear sufficient to improve formal credit access for small land holders.

IV. LAND RIGHTS FORMALIZATION AND ACCESS TO CREDIT: A COMPREHENSIVE FRAMEWORK

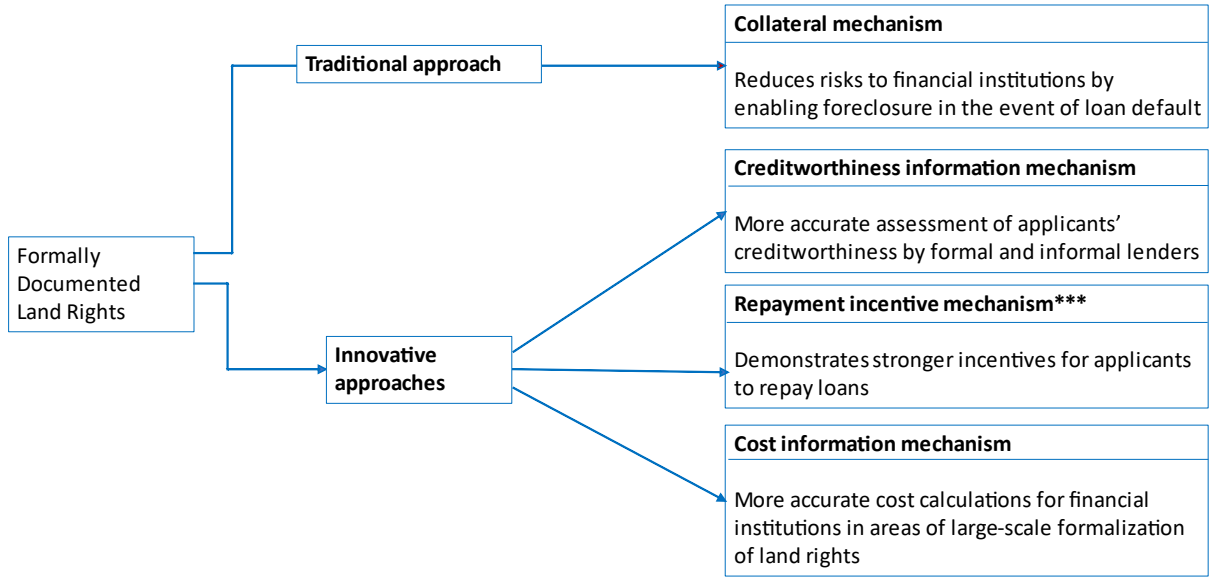
While de Soto's hypothesis has been widely studied and debated, a nascent body of evidence suggests other links between formalization and credit that may exist and are less well-recognized. Numerous examples of these links have been documented in the literature or described by program implementers, but they have yet to be assessed and characterized in a systematic way. Our research seeks to identify and synthesize these examples, in order to more fully characterize the mechanisms by which formalization can improve access to credit.

Figure 1 presents the results of our synthesis and characterizes the pathways in which formalization can improve credit access in terms of four mechanisms, shown in the last column. The first of these is the well-known collateral mechanism described in Section III. In the rest of this section, we define and describe the three additional mechanisms in greater detail, including how each may have differential impacts for different subgroups, and summarize the evidence from our literature review and KIIs related to each.

DEMONSTRATES STRONGER INCENTIVES FOR APPLICANTS TO REPAY

The second mechanism also relates to collateral, but in a different way from the previous mechanism. Even when financial institutions may not have the legal capacity to foreclose or it would be cost-prohibitive to do so, merely taking possession of a borrower's land title or certificate may serve as incentive for borrowers to repay their loans. In the event of default on the loan, the bank's physical possession of the 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. The fact that the applicant is willing to risk incurring these problems by providing their land document as a security can be a useful demonstration of their creditworthiness.

Figure 1: How can formalizing land rights improve access to formal credit?



***Our research found indications of lenders exploiting borrowers under this mechanism, which may suggest a need for further investigation, regulation, and borrower education

Alternatively, information asymmetries may mean that borrowers who provide their land documents as collateral are unaware that foreclosure would be impossible or infeasible. Faced with a seemingly credible threat of dispossession if they default on their loan, borrowers feel a strong incentive to repay. For financial institutions, this incentive increases the creditworthiness of the borrower, even if it results from the borrower incorrectly perceiving the credibility of the threat of foreclosure. It is important to note that this effect will only occur when borrowers lack accurate information about the feasibility of foreclosure on their land in practice. Over time, it will be undermined as borrowers learn that financial institutions are unable to foreclose on their land in the event of default.

Our research found several examples of this mechanism in practice, primarily among microfinance organizations. In a USAID impact evaluation study, Persha et al (2017) found anecdotal evidence from the ELAP program in Ethiopia that suggests that second-level certificates are used as internal assurance against payment defaults by group members of microfinance institutions (ELAP, 2012). Likewise, in a study of the lending strategies of informal lending institutions such as microcredit organizations in Tamil Nadu, Mowl (2016) found that lenders use titles to induce repayment incentives along with other coercive methods.

This mechanism was also highlighted by two of our key informant interview subjects. Informants from the Grameen Foundation that were interviewed described the MFIs they work with as being "very opportunistic," in that they will keep the land titles of borrowers who have land as a means of incentivizing them to repay their loan, even though the financial institution is not interested in seizing the land in the event of default. Instead, it acts as a "threat." Similarly, the loan managers interviewed from two Primary Agriculture Cooperative Societies (PACS)[3] in West Bengal, India also pointed out that they hold onto titles to induce repayment by playing into borrowers' fears of losing their land. Individual borrowers are required to provide land

[3]Names of PACS are withheld to protect the anonymity of the informants.

documentation and pledge their land as collateral, but in practice they never foreclose on the land. Like microfinance institutions (MFIs), PACS rely on personal relationships with borrowers and in-depth vetting of the borrowers' creditworthiness by verifying ownership of land with local land and village officials. While the option to seize the land is never exercised by the PACS, they are able to maintain the lien on the land until the borrower repays, preventing the borrower from selling the land or borrowing from other lenders.

Situations wherein lenders falsely use the threat of dispossession as incentive or hold on to documents illegally make this mechanism problematic and potentially exploitative of would-be borrowers. That this dynamic is occurring among MFIs, especially, and PACS is especially concerning because these institutions often emphasize lending to low-income and less educated women, who would be expected to have less understanding of their land rights and power to act on them. Countries in Latin America, Asia and Sub Saharan Africa have passed laws to regulate MFIs that use predatory lending practices including limiting interest rates and over indebtedness of borrowers, preventing MFIs from holding documents, seizing land and other assets and selling them illegally to recover loans, public ostracization of defaulters, making visits to borrowers' homes to threaten them, etc. (Green 2020; Butcher and Galbraith 2019; Saad 2104; Coetzee et al 2005).

MORE ACCURATE ASSESSMENT OF APPLICANTS' CREDITWORTHINESS BY LENDERS

Formal land documents can also provide useful information to financial institutions about applicants' creditworthiness even when they are not provided as collateral. In this case, titles or other certificates of long-term possession can serve as indicators of a borrower's long-term presence, reliability, and stability, as signs that they are an established member of the community and have the ability to repay a loan and potentially seek future financing. When titles are supported by surveying or other mapping and a reliable land administration system, numbers and sizes of the borrower's landholdings as well as their ownership and any pre-existing liens against the property can be confirmed more readily. This can help to inform the lender of the viability and potential profitability of the borrower's proposed investment, and therefore the likelihood of full repayment. If a prospective borrower comes from an area where titles are sought sporadically, i.e. at the initiative of the landholder, the documentation of ownership can also signal the "seriousness" or responsible nature of the borrower in that they took the initiative and invested their resources to secure their land. Relatedly, formalization can also increase the value of land, thereby further bolstering the creditworthiness of the land holders seeking loans.

Among the alternative mechanisms, the indicator of creditworthiness mechanism is the most frequently documented in the literature. This mechanism is highlighted by Dower and Potamites (2012) in a study of access to finance in Indonesia. They find that first-time applicants who provided land as collateral were offered 53 percent larger loans by financial institutions. However, this impact diminishes considerably for repeat borrowers, indicating that providing land as collateral serves some additional function beyond enabling foreclosure in the event of default. The authors' explanation for this difference is that formal titles play a signaling role to lenders by revealing difficult to observe applicant characteristics. Field and Torero (2006) draw similar conclusions in their study of the effects of titling in Peru's urban squatter settlements. They find that applicants with land titles are offered lower interest rates even when the land title is not used as collateral to obtain the loan, suggesting that possession of a land title signals improved creditworthiness to banks beyond its value as collateral.

The USAID impact evaluation study by Persha et al (2017) also points to the indicator of creditworthiness mechanism. The study found significant correlation between second level land certification in Ethiopia and the likelihood and amount of credit obtained, but no evidence of a positive link to credit with use of land as collateral. As a potential explanation, the authors cite anecdotal evidence indicating that parcel maps produced through the certification exercise enabled banks to verify parcel sizes and tailor loan amounts accordingly.

Two studies from India that consider the perspective of lenders also find evidence of the indicator of creditworthiness mechanism. Mowl (2016) studied the lending strategies of semi-formal/informal lenders (such as unregulated micro-credit lenders) in Tamil Nadu, India. She compared the loan screening, collateral, interest rates, and collection methods of the lenders and found that they may require quasi-legal documentation such as promissory notes or land titles to signal borrower's creditworthiness. In these cases, titles provide information to the lender on the borrower's identity, location, size, and nature of assets. Similarly, in a study of access to credit by street hawkers in Mumbai, Joshi (2005) found that formal lenders use standardized information to signal creditworthiness including verification of liquid and fixed assets (including land titles), and documentation providing proof of residence, photo, and ration card/ passport, and salary/income slips. In this case, it is less expensive for institutional lenders to evaluate the creditworthiness of hawkers with a number of formality-related characteristics compared to hawkers who lack these.

Several of our KII respondents also described experiences indicative of the indicator of creditworthiness mechanism. Informants from two different PACS in West Bengal, India, reported that in addition to reviewing the loan and repayment history of the borrower, their organization requires land titles or deeds or other formal land documents such as legal heirship certificates, tenancy or sharecropping agreements from the borrowers to verify land or asset ownership, the size and type of agricultural land, and the type of crops or product that can be supported on the land. Those with records that are not updated, tenants, and women face additional barriers to borrowing from PACS even though PACS are not very rigid about the type of land document used as long as they can prove ownership or tenancy rights. Borrowers with land documents that are not updated need to provide proof that they are the true owners from local government officials. Tenants are allowed to borrow but landlords are resistant to providing written proof for fear of tenants claiming cultivators' rights to the land. Women borrowers have to provide land documents that are owned by them, they cannot provide documents that belong to another household member. This could potentially lead to an exclusion of women borrowers since most land documents do not include women's names.

Informants from five MFIs[4] that lend to households with Land Use Certificates (LUCs) from the Ayeyarwady region of Myanmar indicated that copies of LUCs are required by MFIs to make agricultural loans to borrowers and are used to verify land ownership, the characteristics of the land, such as size and type of land, and to verify that the land can support the land-based production for which the loan is intended. However, the loans are only guaranteed through group savings schemes.

Interviewees from MicroBuild Fund indicated that their MFIs sometimes request land titles from loan applicants, but not because the titles can be used as collateral- rather, the MFIs see them as a way of assessing creditworthiness. Some MicroBuild supported MFIs also accept "soft

[4] Informants names and organizations are withheld to protect their identities.

titles," i.e. tenure documentation used locally or developed with the support of a local entity, but not formally recognized by the country government. Informants stated that MFIs have mastered the underwriting process sufficiently to lower their risk, such that they rarely encounter cases of default, offsetting the need to rely on high-value assets like land for collateral.

Finally, our respondent from the ILRG project notes that the indicator of creditworthiness mechanism entails bias against women and secondary land rights holders. For example, women in rural Zambia often lack registration numbers and phones, and even when women are jointly registered on land documents with their husbands, full information on women is not always captured. Exclusion of information on women in land information systems may in turn reduce their prospects of securing credit. Similarly, the landless and renters will not be included as holders of documented tenure and may therefore be overlooked as potential borrowers. ILRG is trying to counter this in Zambia by working to link Village Savings and Loan Associations (VSLAs), which are often headed by women, to MFIs so that they can provide better information to build the creditworthiness of women and secondary rights holders.

ENABLE LENDERS TO CALCULATE COSTS MORE ACCURATELY

Information from formal tenure documentation can also help lenders to reduce their costs, thereby increasing their willingness to provide loans. Land documents can provide reliable information to the financial institution of the applicant's identity, their land rights, and their location. This can reduce the financial institution's transaction costs associated with verifying the applicant's identity and asset ownership, as well as the costs of finding and contacting the borrower. Having to present a title or other form of land certification may also reduce the risk of potential fraudulent applications.

The tenure information provided through formalization of land can also be used by financial institutions to assess the potential costs of lending to households in the regularized area such as placing personnel in newly regularized areas or setting up a local office close to the area to improve resident's access to credit facilities. This benefit is likely to be most prevalent in areas undergoing systematic land regularization and strengthening of land administration systems.

Empirical research on the use of land rights documents, including cadasters and registry records, by lenders to assess the costs of lending was not identified in our literature search. We found one example of this mechanism in our KIIs from the USAID ILRG project in Zambia. ILRG is working with a local microfinance institution, mobile money providers, and village savings and loan associations to increase rural smallholders' access to credit. This work has included leveraging information collected as part of the tenure documentation process that can enable these lenders to target potential borrowers. The information can be assessed either at a macro-level to identify clusters of formal landholders who may be attractive lending targets and the presence of vendors and markets, or at a household level to help evaluate a loan applicant's creditworthiness, such as information on parcel size, national identity numbers and cell phone possession (an indicator of liquidity). Currently, ILRG is providing tenure information to the microfinance institution Madison Finance. At a macro-level the data helped Madison Finance to assess the start-up costs of entering new areas to offer financial services by identifying population centers to place their agents close to customers, as well as for achieving their Know-Your-Customer requirements. At the parcel level, land certificates acted as proof of identity and residency. Prior to this Madison Finance relied on signed letters from traditional leaders to vouch for the residency of potential borrowers. In their first agricultural season of offering financial products to rural smallholders Madison Finance signed up more than 700 community

members (over 60% women) for savings accounts and delivered a basic agricultural loan product to almost fifty community members. During this first season farmers felt more comfortable with input-based seed loans, and this engagement stimulated more interest in the savings products. The concept of cash loans was of less interest, though it would be expected to increase as individuals' comfort with using the savings accounts increases over time. Madison Finance is enthusiastic about the continued use of the customary land administration data to support their extension services to rural smallholders but continues to require subsidization to extend its services into rural areas. While they provided qualitative evidence of the value of land documentation, they were reluctant to estimate whether this resulted in any savings or efficiencies that could be passed along to beneficiaries. This is also an experiment in lending to rural smallholders since most MFIs in Zambia lend mainly to the middle class and urban poor.

V. EVIDENCE ON COMPLEMENTARY MEASURES TO LEVERAGE CREDIT IMPACTS

Having described the mechanisms by which formalization of land rights can potentially improve access to credit, we now turn to the question of how these impacts can be realized in practice. We present detailed summaries of three case studies based on our KIIs of programs that have included innovative approaches to strengthen the credit impacts of formalized land rights in various ways:

USAID LAND TENURE ASSISTANCE (LTA) - TANZANIA

In Tanzania, the **USAID Land Tenure Assistance (LTA) activity (2015-2019)** supported rural communities to engage in village land use planning, map smallholder parcels, and deliver Certificates of Customary Rights of Occupancy (CCROs) to village members. With CCROs documenting perpetual and transferable rights, some banks have been willing to accept these certificates and the rights they represent as collateral for loans. In most cases, borrowers using CCROs must have holdings exceeding 50 hectares- a much larger landholding than a typical household farm- although some are willing to lend to groups whose combined smaller holdings meet this threshold. Whereas these loans tend to be short-term (1 – 3 years) and linked to seasonal production, their interest rates – usually between 15-20% per year-- are typically less than half the rate that MFIs charge smallholders. In 2018, the Deputy Minister of Lands announced that within only one year, eight financial institutions lent around 26 million dollars with CCROs provided as collateral. More recently, the Tanzania Agricultural Development Bank has also committed to accepting CCROs as collateral.

Despite this headway, barriers continue to exist that make banks reluctant to lend against CCROs. One is the cost that financial institutions must pay to register mortgages, which has been around 100 dollars. For loans to smallholders, this can represent a significant percentage of the loan size, undermining bank profit margins. In addition, restrictions on land sales to village members (absent consent from Village Land Committees) mean that banks face a limited buyers' market in the event of loan default and foreclosure. Moreover, villagers can opt to shield their fellow members from losing their land by refusing to purchase it and discouraging outsiders from doing so. But in other cases, they have shown solidarity by chipping in to cover their neighbor's loan arrears.

LTA has facilitated the use of CCROs as collateral in various ways. Use of Mobile Applications to Secure Tenure (MAST) technology has ensured that parcel size and location is properly documented in CCROs, such that banks have a much clearer idea of the potential value of the parcel they are lending against. LTA has also negotiated to substantially reduce the cost of registering mortgages to only 10 dollars per loan as well as reduce fees for post-registration transactions. LTA helped to establish the "TRUST" system for tracking post-registration transactions, including mortgages. At a smaller scale, LTA is providing a loan guarantee to one bank to encourage provision of agricultural loans to women and youth. It is exploring whether this same bank could provide financing to villages for systematic regularization with the promise of being able to extend loans to smallholders against CCROs in the future.

FCDO LAND INVESTMENT FOR TRANSFORMATION (LIFT) - ETHIOPIA

The **Land Investment for Transformation (LIFT)** program, funded by the U.K. Foreign, Commonwealth & Development Office (FCDO) works with MFIs in Ethiopia to promote individual lending options for rural smallholders that have advantages over traditional group lending schemes. Individual loans tend to be larger (typically between ETB 25,000 and ETB 100,000, rather than ETB 3000-5000) and do not require the group to be held liable for the loan or for loans of group members to be repaid in full before other group members can access their savings. Loan purposes and terms can also be tailored according to the needs, business plans and creditworthiness of the individual borrowers, offering greater flexibility than loans via group schemes. Individual loans also tend to have longer terms than group loans (up to three years, rather than one year) and comparable interest rates.

Instead of being backed by accrued savings of the group, individual loans are guaranteed by the use rights granted to households, utilizing their second-level land certificate (SLLC). Since under Ethiopian law, land cannot be mortgaged or otherwise alienated, MFIs can only acquire the borrower's land use rights temporarily. Rather than sell the land, they must rent it to another farmer until such time as they have collected the equivalent of the outstanding debt. Then, the land must be returned to the borrower, as the original landholder. SLLCs, which were issued through systematic land rights regularization supported by LIFT, enable MFIs to verify the legal owner of the land and therefore the crops cultivated on the land and also the parcel size.

Most loans are for agricultural productive purposes, mainly inputs, labor and equipment, but there are also some MFIs that lend for off-farm income generating activities. In households with legally married couples, both spouses must participate in the application process and sign the loan agreement. Once loans have been approved, MFIs then register them with the local land office.

Currently, LIFT has provided technical assistance to MFIs in three regions (Amhara, Oromia and SNNPR) to develop these individual loan products, prepare corresponding manuals, and provide training and targeted technical assistance to MFI staff. LIFT does not provide any direct funding to the MFIs. To date, these MFIs have collectively disbursed 17,900 SLLC-backed individual loans valued at around ETB 600 million (over USD 17 million). The new loan product is widely considered a success by MFIs who report a default rate of only around two percent, lower than that for group loans.

LIFT has also lent support to policy advocacy initiatives to allow the use of SLLC-backed loans in other regions and to garner support for them at the Federal level. One of the primary challenges of the program has been to pilot the loan product in the absence of a federal legal

framework sanctioning use of land as collateral. In 2017 a regional proclamation for Amhara was approved allowing the use of land rights as collateral. Fifty percent of the SLLC backed loans come from this region and LIFT. There is also a draft federal proclamation in place. Once passed, it is expected that uptake of SLLC-backed lending by MFIs will take off in other regions. However, these MFIs are likely to still face liquidity constraints initially since average loan sizes per household under group lending schemes have traditionally been much smaller than individual loans secured by SLLCs.

WORLD BANK ACCESS TO LAND PROGRAM (PACTA) - HONDURAS

The **Access to Land Program (PACTA)** in Honduras specifically seeks to facilitate access to land and housing by the poor through mortgage financing. With funding support from the World Bank, it was launched as a pilot project in November 2000 with the objective of supporting land acquisition and the formation of sustainable farm enterprises by self-organized landless and land-poor families. While PACTA's objectives did not focus specifically on formalization of land rights or credit access, both were employed as means of achieving the primary goal of access to land and enabling farm enterprises to thrive and be sustainable.

The program was founded on principles of building durable alliances between small scale farming enterprises, the financial sector, technical assistance providers and other public and private service providers to improve rural livelihoods and increase rural employment. Under the program, PACTA's management unit operated mainly in western Honduras, linking farming groups and individuals to technical assistance providers who would work with them to develop business plans to initiate farming enterprises and thereafter provide technical assistance to implement these plans. Once business plans were established and groups were registered as legal entities, PACTA helped connect these nascent enterprises to commercial banks and credit cooperatives that would provide them with loans to purchase land to launch the agricultural enterprises.

Mortgage loans of six to seven years were extended to the farming enterprises on commercial terms with the land serving as the guarantee. Once the loan is fully repaid, the lien is lifted, and the land is designated freehold property of the farming enterprise. However, most financial institutions had little or no experience lending to small scale rural farmers. PACTA therefore assisted these banks to develop appropriate, non-subsidized lending products, while also injecting a series of "incentives," which included payments to technical assistance providers to accompany farming enterprises for two to three years, grants to farming enterprises to support business plan implementation costs such as input and capital purchases, and loan guarantees to lenders of up to thirty percent of the loan value. Key informants also cited the fact that investments in the land by the farming enterprises, such as soil improvements and irrigation works, resulted in increased value of the mortgaged property over time.

By the end of the pilot period in December 2006, 181 loans valued at 2.88 million dollars USD had been disbursed to group and individual farming enterprises by 17 financial institutions, resulting in the acquisition of 2,398 hectares of land (World Bank, 2007). At that time, the program boasted a repayment rate of 97.3 percent, which it credited to careful selection of its clients, rigorous business plan development, ongoing technical assistance and service provision, and close monitoring and evaluation that enabled early intervention when difficulties were encountered (World Bank, 2007; FAO, 2006). FAO (2006) also reported that families participating in the program more than doubled their incomes and that the program generated over 3,600 jobs for persons not directly involved in the program (FAO, 2006). In 2007, the

program was taken over by the Government of Honduras, which ran it on a lean budget before dropping it in favor of other rural development projects and priorities. Thus far, we have not been able to confirm whether any monitoring data was collected during this phase of the program and the extent of lending that took place.

An interview with four key informants from the program revealed that one of the major challenges encountered by the program was the identification and acquisition of legally secure land by the farming enterprises. They estimated that only 20-30 percent of lands identified for potential purchase had at the outset, the appropriate legal conditions in place necessary to move forward with the transfer. Often lands were occupied by squatters or had other deficits that increased the transaction costs of the transfer, such as the number of hectares stated in a title not matching with the case on the ground. PACTA assisted the productive enterprises to navigate these difficulties in the land identification process. There are very few projects for land regularization in Honduras, so these problems exist country wide. The Honduras Land Administration Project, a parallel project to PACTA also financed by the World Bank, sought to strengthen the legal tenure security of landholders with support to the land registry and cadaster. According to the informants, however, the situation has improved very little. After PACTA ended, the country embarked on efforts to strengthen land information systems at the municipal level, but these efforts are still in progress, and there is still a long way to go in order to have a complete and accurate registry and cadaster in the country.

The program also encountered difficulties in reaching women. According to informants, only around 20 percent of the members of the productive enterprises were women, mostly female heads of household. Group farming enterprises are typically formed by men and allow only one person in the household to serve as a member; this is usually the male head. Although in cases of land purchases by farming enterprises, land was titled in the name of the legal entity, not in the name of individuals, the membership of the group effectively put control over the land in the hands of mostly men.

Informants further lamented the insufficient time and funding to institutionalize the practice of lending to smallholder productive enterprises. The initial pilot project was only 9 million dollars, which was not sufficient to achieve a significant, durable change in lending practices. Moreover, when the portion co-financed by the World Bank ended in 2006, the government took over the support, but with only around 2.5 million dollars per year starting in 2007 until 2015, which mainly went to monitoring existing investments and only allowed for the addition of a few new productive enterprises. Informants did not feel confident that financial institutions in Honduras had embraced lending to rural smallholders on any significant scale following the close of the program. It also seems possible that without the different incentives provided by the program that lenders perceive the risks of lending to this group to be too high, particularly in light of the transaction costs of potentially foreclosing on small properties.

VI. CONCLUSIONS

Formalization of land rights can improve access to credit along a number of different pathways. The most well-known and widely studied of these is that formal land rights can reduce risks for lenders by enabling land to be used as collateral, as popularized in Hernando de Soto's influential book *The Mystery of Capital*. The evidence on the efficacy of this mechanism is mixed and indicates that people experiencing poverty are often excluded. Recent research and project experiences have suggested different ways in which formalization and credit can be

linked. Our synthesis of this literature identified three additional mechanisms: demonstration of stronger incentives for potential borrowers to repay, improved information on creditworthiness, and more accurate estimation of lenders' costs.

In drawing conclusions for policy and programming, there are some important caveats to bear in mind. First, the existing literature on all of these mechanisms (with the exception of the traditional collateral hypothesis) is limited almost entirely to anecdotes and theoretical arguments. Thus, although we found that the indicator of creditworthiness was most frequently mentioned in the literature, that should not be taken to mean that there is more evidence of the effectiveness of that mechanism as compared to the other mechanisms. Rather, very little is known about any of the additional mechanisms, and the framework and review in Section III should be seen as a starting point for future research.

It is also important to bear in mind some limitations on the extent to which formalization has the potential to impact credit access. A would-be borrower may be unable to access credit for a range of different reasons. For example, low or highly variable incomes make some borrowers too risky for lenders, lenders may be unable to obtain sufficient information to reliably assess creditworthiness, and/or the costs of managing the loan may be too high for lenders to be willing to offer it. The mechanisms described in Figure 1 may enable some borrowers to access credit as a result of formalization, but for others, formalization will be insufficient to overcome the constraints they face. For example, tenure documentation can provide valuable information about applicants' creditworthiness, but it is not necessarily among the most important sources of information for creditors. Factors such as a borrower's sex, reputation in the community, prior debt repayment history, savings, ability to secure regular income streams, access to technical assistance, together with the riskiness of the loan investment activity often substantially inform a borrower's risk profile and are not conveyed through tenure documentation.

Inclusivity and equity are essential considerations in thinking about how these mechanisms function in practice. Marginalized groups such as women, youth, and people experiencing poverty often face greater barriers to credit access than other borrowers. Depending on contextual factors of credit markets, social and gender norms, and equity of formalization efforts, the beneficial impacts of formalization may leave these marginalized groups behind or the different mechanisms may ease constraints these marginalized groups face. Existing research does not adequately examine gendered constraints to and impacts of land formalization on credit access, although programs are aware of, and in some cases, trying to address the constrains.

Another important consideration is how credit impacts may differ for married women. If formalization efforts do not incorporate mandatory joint titling, married women will likely be excluded from any benefits of improved credit access. Similarly, if women lack sufficient decision-making authority within the household, even formalization efforts that include joint titling will not improve credit access for these women. Women in customary or informal marriages may be especially vulnerable, particularly if they are excluded from joint titling provisions. Moreover, enabling land to be used as collateral can even increase the vulnerability of spouses or informal partners. Offering land as collateral for a loan entails a risk to the household, and for women who are not empowered to have a say in making that decision, that risk may be imposed on them unwillingly. These women may become co-signers on debt secured by their husbands and liable for its repayment but continue to lack access to financing for their own enterprises and investments .

Finally, the case studies in the previous section illustrate that the credit benefits of formalization can sometimes be leveraged by innovative complementary interventions, including approaches for reducing lenders' risks and increasing their information to increase credit supply. Identifying the appropriate measures requires a detailed understanding of the context, and the particular constraints that borrowers face.

VII. RECOMMENDATIONS FOR PROGRAMMING

1. **IF A FORMALIZATION PROGRAM'S GOALS INCLUDE INCREASED ACCESS TO CREDIT, THEN IT SHOULD ACTIVELY ENGAGE IN GENERATING CREDIT IMPACTS BOTH THROUGH NON COLLATERALIZABLE AND COLLATERALIZABLE LOANS ESPECIALLY IN CONTEXTS WHERE AN ENABLING ENVIRONMENT EXISTS OR CAN BE CREATED.** Often programming to formalize land tenure is carried out with the assumption that it will organically result in improved credit access for the poor, and these claims are provided as part of their justification. However, as several assessments have demonstrated this is often not the case. Evidence gathered in this research suggests that programs that explicitly engage with the financial sector, and even pursue financial sector reforms, are more assured of enabling this theory to materialize into reality. To do this well, programming should seek to work closely with financial institutions and their target communities to assess whether and how land-focused programming can influence both the supply and demand for credit.

   On the supply side, it is important to identify gaps that hinder the financial sector's ability to lend to poorer households such as restrictions on collateralization of formalized land and problematic fiscal policies (supply side constraints). For example, supporting the creation of public or private credit registries that track beneficiaries' borrowing history and other pertinent information could enable lenders to lower the costs of assessing borrower creditworthiness and low-income communities to shift from higher cost informal credit to formal borrowing. MCCs Property Rights Project (PRP, 2008-2013) in Mongolia that strengthened the land registry system, increased the efficiency of land transactions. Programming could also support the inclusion of different credit products and models within a single institution to cater to different kinds of borrowers. For example, in Ethiopia, LIFT used a market systems approach to first analyze the root causes that prevented low-income title holders from getting individual loans from MFIs. On determining that the main reason for this was lack of ''acceptable collateral'' LIFT helped to design a new loan product with the MFIs thereby expanding MFIs client base and increasing the level of individual lending to low income borrowers using land certificates. The innovation has also resulted in policy changes at national and regional level.

   However, these measures may not be fruitful if the larger political economic context and agricultural system inhibit smallholder farmers' demand for credit, even when they have formal land rights. Partnering with financial institutions to offer non-collateralized loans along with trainings on financial literacy and measures to improve women's access to credit may improve access to credit for poorer households and may be more palatable to the poor given their preference to not risk losing their primary asset.

2. **IN PARALLEL TO FORMALIZATION, ASSESS NEEDS FOR FINANCIAL LITERACY AND INCLUSION MORE BROADLY AND CONSIDER COMPLEMENTARY PROGRAMMING TO RAISE DEMAND FOR CREDIT.** 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. In addition, access to other financial products such as savings and insurance can help borrowers reduce the risk of default and potential foreclosure. Complementary measures to address financial literacy and inclusion should be informed by a careful assessment of needs and opportunities in the particular context where the program is being implemented.

3. **CONSIDER OTHER COMPLEMENTARY INTERVENTIONS OR PARTNER WITH LOCAL FINANCIAL INSTITUTIONS TO LEVERAGE THE CREDIT IMPACTS OF FORMALIZATION BASED ON SUCCESSFUL APPROACHES FROM OTHER PROJECTS, FOCUSING ON INNOVATIONS MADE ON NON-COLLATERALIZABLE LOANS.** In many cases, the credit impacts of formalization can be increased by combining formalization with other targeted interventions. The appropriate measures depend on the context, and the particular constraints that potential borrowers face in that context. Examples of innovative approaches that projects have successfully adopted include:
    - Working to connect beneficiaries to financial institutions
    - Subsidizing mortgage registration costs to ensure smaller loans that benefit the poor are attractive to lenders
    - Tailoring land information systems to provide lenders with information that enables applicants to demonstrate creditworthiness
    - Creating legal provisions that enable lenders to rent land out
    - Working with financial institutions to create appropriate products for groups they aren't accustomed to lending to such non-collateralizable loans and non-cash loans for seeds and other agricultural inputs which would be less risky for smallholders.
    - Targeting these complementary measures towards women, low income, or other groups who face additional barriers to credit access.

4. **SUPPORT DOCUMENTATION OF LAND RIGHTS IN WOMEN'S NAMES AND ENSURE THAT SPOUSES MUST APPROVE OFFERING LAND AS COLLATERAL FOR LOANS.** While major strides have been made in many countries to allow for the inclusion of women on land titles and certificates, many married women and consensual union spouses continue to be excluded from having their names recorded as co-owners. Programming that advocates for mandatory joint titling or access by women to their own land combined with land rights awareness, financial literacy training, and social behavior change activities aimed and gaining the support of men, communities, institutions, and local leaders for women's land rights holds promise for facilitating their access to finance and ultimately economic empowerment. In addition, safeguards may be needed to ensure that household land cannot be offered as collateral without the spouse or partner's consent. The risk is that in some contexts efforts to include women spouses in decision-making may lead to backlash against women. Even if women do not face backlash, including wives' names on a land document or requiring her signature as consent to mortgage land may not mean that they can influence decision-making regarding the land.

5. **OFFSET RISKS FACED BY FINANCIAL INSTITUTIONS, PARTICULARLY IN LENDING TO SMALL SCALE AND AGRICULTURAL BORROWERS.** This may include improving land information systems to capture information on whether there are liens or other claims against a property and making them readily accessible to lenders. It may also include providing loan guarantees for an initial period of time until financial institutions gain experience with lending to small scale borrowers. Agricultural loans can be especially risky.

Inducing banks to lend to smallholders may necessitate assurances like those provided by the PACTA model: delivery of quality technical assistance to borrowers and co-financing. The risk is that once these incentives are removed, banks return to their former mode of risk assessment, especially for new small-scale borrowers.

6. **Use land programming to support financial sector information needs.** In areas where USAID supports systematic formalization of land using data collection tools such as MAST, there may be opportunities to collect information that can attract financial services to communities whose land tenure is being regularized. For example, information collected from households on parcel size and location, land use and types of crops grown, employment status, cell phone ownership and use (an indicator of liquidity), and types and level of debt of the beneficiaries are useful not only for a lender to assess a potential borrower's creditworthiness, but also at an aggregate level to determine risks and estimated costs of lending to a community and whether to extend services there. The risk here is that it is not only possible to use such information to determine which communities to include, but also which ones to exclude. Furthermore, there may be legal limitations on sharing information on beneficiaries. Even if no legal safeguards exist, sharing information on beneficiaries may make them more vulnerable and therefore should only be done if appropriate processes are in place to protect vulnerable borrowers.

7. **PILOT ALTERNATIVE LAND 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 such as the one employed by LIFT, which allow lenders to secure temporary use rights of land in the event of default, may offer a better alternative. While any loss of land use will impose serious economic consequences on smallholders, temporary loss of rights to agricultural land is likely to be less damaging, while also allowing the lender to recover their losses. Alternatively, the lender may be able to direct the borrower in default to rent the land themselves with a set amount of the rental price directed to the lender to repay their debt. To work, however, there needs to be a robust seasonal rental market and protections that ensure owners are able to return in a timely fashion to land that has not been damaged. The ability of a lender to place a lien on a borrower's property without the right to take possession of it, also may act as sufficient incentive to induce prompt repayment. Such liens could prevent any permanent land transfers or mortgages, and also demand borrower approval for other types of transactions, such as rentals. To work, a robust land information system accessible to creditors would need to be in place.

8. **CREATE PRODUCTS THAT ALLOW WOMEN, TENANTS, AND OTHERS WHO LACK LONG-TERM, DOCUMENTED LAND RIGHTS TO BENEFIT FROM FINANCIAL INCLUSION.** Credit products that use other forms of guarantees and repayment incentives, such as group savings guarantees, and mobile asset collateral might be beneficial. For example, ILRG is working to link MFIs with VSLAs with the goal of enabling individual VSLA members, who are 60 percent women to share their tenure information with the lender to inform their creditworthiness profiles. MFIs use VSLA information to determine whether there is enough circulation of cash and to understand how people are saving before they take any real risks to give out loans. Using VSLAs helps to address the exclusion of women, tenants, secondary users of land, and landless people who would not be represented if only land tenure information was used.

9. **CONDUCT FURTHER RESEARCH TO BETTER UNDERSTAND THE LINKS BETWEEN FORMALIZATION AND CREDIT:** While the framework presented in this report provides a useful starting point, more evidence is needed on how these mechanisms function in practice, for whom, and under what circumstances, in order to enable more evidence-based programming and policy decisions. Formalization programs should closely monitor and evaluate credit impacts, including gendered impacts, and actively share lessons learned. One line of research that could be particularly fruitful would be to better understand how financial institutions perceive these mechanisms- how effectively do they improve information and reduce risk in ways that make financial institutions more willing to extend loans?

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ANNEX A: KEY INFORMANT INTERVIEW GUIDES

KEY INFORMANT INTERVIEW GUIDE FOR LAND FORMALIZATION PROGRAMS/PROJECTS

Name of Informant:
Position:
Name of the project:
Period of Implementation (month/year to month/year):
Primary Implementer:
Funding partner(s):

Introductions. Explain purpose of research, implementation and support. Request permission to record interview and provide assurance that interview contents shall remain confidential (only researchers working on the project will have access) and be destroyed once research is complete.

1. What were the primary objectives of the project? Were any of these objectives centered on formalization of land rights? On facilitating access to credit? If yes, please explain.
2. What measures are/were taken to enable registered/documented land tenure to facilitate access to credit?
3. What are/were the target groups of borrowers (e.g. rural/urban/peri-urban, poor, middle class, small/medium scale farmers, small/medium scale business owners, women, ethnic minority group(s), etc.)?
4. What is/was the theory of change, i.e. explain how documented tenure was foreseen to facilitate credit access for the target group(s)?
5. Please indicate whether any of the following uses of tenure documentation by financial institutions guide(d) programming designed to facilitate access to credit. Please **rank up to 3** uses according to their importance, i.e. 1 if it was the most important factor guiding programming, 2 if the second most important factor and 3 if the third. If none of the listed reasons guided programming, please complete only the Other category.
    a. to serve as a guarantee or collateral for the loan in the event a borrower defaulted on their loan. Rank: ____
    b. to serve as confirmation of the applicant's identity and land rights. Rank: ____
    c. to serve as a signal of a potential borrower's creditworthiness. Rank: ____
    d. to reinforce a borrower's likelihood of repayment through fear of potentially losing their land, even though the tenure documentation was not actually used as collateral. Rank: ____
    e. to act as a support for the use of land-based products (e.g., crops or livestock) as collateral. Rank: ____
    f. to provide information to a financial institution to determine the expected costs of lending. Rank: ____
    g. Other, please explain: _____ Rank: ____
6. Please explain further **how** programming was designed to facilitate the different uses of tenure documentation to improve access to credit, and **why** this project elected to pursue these particular uses.
7. Did/does the project have particular credit access targets or objectives? What were/are they?
8. Are there any particular targets/objectives for reaching women or other vulnerable groups? Please specify/explain.

9. To what extent did/has the project met these credit access targets/objectives? (*If quantitative target, seek quantitative response on achievement of target. Otherwise, seek specific examples of how progress is measured.*)
10. What challenges were/have been encountered in your support for tenure documentation to facilitate access to credit?
11. Are there any particular challenges encountered with reaching women or other vulnerable groups? Please explain.
12. Have any assessments of the project's impact on credit access been carried out? if yes…
    a. Impact assessment or performance assessment?
       If impact:
       i. Baseline? Yes/no. If yes, Month/year?
       ii. Endline? Yes/no. If yes, Month/year?
       If performance:
       iii. Month/year?
    b. What assessment methods were used (e.g. household surveys, focus group discussions, key informant interviews)?
    c. Was data disaggregated by gender or other criteria to analyze effects on particular groups? Yes/no. Please explain.
    d. What were the main results/findings?
    e. Was a written report of the assessment produced? Yes/no. If yes, may we receive a copy?
13. If no assessment has been done, was any anecdotal evidence collected of the project's influence on credit access, and especially the influence of documented tenure? Is it possible to share this evidence with us?

KEY INFORMANT INTERVIEW GUIDE FOR LAND FORMALIZATION FOR MFIS/PACS

Name of Informant:
Position:
Name of the project:
Period of Implementation (month/year to month/year):
Primary Implementer:
Funding partner(s):

1. What are the mission and major objectives of the MFI? What services does the MFI provide to its clients?
2. What is your role within the organization?
3. When it comes to the MFIs lending services, who are target groups of borrowers (e.g. rural/urban/peri-urban, poor, middle class, small/medium scale farmers, small/medium scale business owners, women, ethnic minority group(s), etc.)?
4. Does the organization have particular lending targets or objectives, in general or for the targeted groups? What are they?
5. Are there any particular targets/objectives for reaching women or other vulnerable groups? Please specify/explain.
6. To what extent did/has the project met the described credit access targets/objectives? (*If quantitative target, seek quantitative response on achievement of target. Otherwise, seek specific examples of how progress is measured.*)
7. What kinds of loans does the MFI make? Microenterprise, agricultural inputs, building supplies, other? What is the range of loan size? What are the repayment terms?
8. Does the organization work in areas where land rights are formalized? Has the organization specifically targeted individuals or households with formalized land rights for lending?
9. What measures does the MFI take to guarantee the loans? (E.g.: Group guarantee, documented land or asset as collateral, savings backed, hybrid measures)?
10. Does the MFI use land or property documentation to facilitate access to credit? If so, please indicate whether any of the following uses of documentation apply:
    a. to serve as a guarantee or collateral for the loan in the event a borrower defaulted on their loan. Explain: ____
    b. to serve as confirmation of the applicant's identity and land rights (e.g. ownership, tenancy or lease rights). Explain: ____
    c. to provide information on the nature of the assets (e.g., size of land, land use, category of land)
    d. to act as a support for the use of land-based products (e.g., crops or livestock) or assets (e.g. buildings) as collateral. Explain: ____
    e. to reinforce a borrower's likelihood of repayment through fear of potentially losing their land, even though land rights were not actually used as collateral. Explain: ____
    f. to help the MFI determine the expected costs of lending, for example, by indicating population density or parcel sizes. Explain: ____
    g. Other, please explain:
11. Have you encountered any challenges with utilizing tenure documentation to facilitate access to credit? If yes, please describe.
12. In relying on tenure documentation, have you encountered any challenges with reaching women or other vulnerable groups? Please explain.
13. Is there any data or any anecdotal evidence collected of the organization's influence on credit access, and especially the influence of documented tenure? Is it possible to share this evidence with us?

ANNEX B: KEY INFORMANTS INTERVIEWED

TABLE 1: KEY INFORMANTS INTERVIEWED FROM PROGRAMS, PROJECTS & FOUNDATIONS

ORGANIZATION/ PROJECT NAME	KEY INFORMANTS	LOCATION
Grameen Foundation	Mona McCord (Director, Agriculture Innovations) Christian Loupeda (Sr. Director Financial Inclusion)	Washington D.C.
Habitat for Humanity, MicroBuild Fund	Scott Merrill (Sr. Dir Pgms, Terwiliger Center) Jyoti Patel (Lead impact investment manager, Terwiliger Center)	32 countries in Asia/Pacific, LA/C, Eastern Europe and Caucuses, Middle East and sub-Saharan Africa.
LIFT	John Leckie (Former Team Lead) Solyana Amsalu (Head of Access to Finance)	Ethiopia
PACTA	Raul Aleman (Former head of program) Hector Chaves (Headed up program post-Bank years) Willem Sanchez (Led financial sector component) Claudia Terrazas (Led commercial alliances component)	Honduras
Tetra Tech/ILRG	Matt Sommerville (Chief of Party) Thais Silveira Bessa (W-GDP Advisor)	Zambia
Feed the Future Land Tenure Assistance Activity	Tressan Sullivan (Chief of Party)	Tanzania