

INTERSECTION OF AGRICULTURAL FINANCE LAWS AND WOMEN'S REPRODUCTIVE HEALTH: AN EMPIRICAL ASSESSMENT IN RURAL SUB-SAHARAN AFRICA

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ABSTRACT

In Sub-Saharan Africa, customary land laws and strict collateral constraints in agricultural credit legislation systematically lock women from access to institutional credit. This empirical study investigates how financial access by rural women impacts access to reproductive health services. Using a mixed-methods approach involving collection of quantitative data from 450 female farmers in three predominantly agrarian districts, together with qualitative key informants, analysis showed that banking institutions typically require registered ownership of land for loans; a condition under which merely 11.3% of the female farmers qualified. As a result, non-borrowing women suffer liquidity problems leading to prohibitive out of pocket payments on health services. Formal financial access by women correlated positively with visits to antenatal care clinics, use of modern contraception, and facility based delivery. The legislative reforms that support non-land as well as gender friendly jointly owned land title would strengthen female empowerment in financial transactions and would, consequently, improve women access to reproductive healthcare services for most agrarian rural women in the sub region even in this day and time.

Keywords: Agricultural policy; Credit access; Maternal health; Gender equality; Reproductive healthcare access; Agricultural extension.

1. 0. Introduction

Agricultural production continues to serve as the linchpin of livelihood and food security throughout rural sub-Saharan Africa. The majority of agricultural workers are women and are responsible for providing over half of total labor requirements and for the entirety of food crop production, processing, and marketing.¹ Thus, despite playing a vital and indispensable role in managing agrarian economies and ensuring household food

¹ Food and Agriculture Organization. (2023). The status of women in agrifood systems.

security, female smallholder farmers are systematically denied access to formal credit and financial assistance from formal institutions.² Through statute and custom formal banking rules backed by customary rules concerning women's rights to property and inheritance women are precluded from accessing institutional credit based on their landownership status.³ Lenders based within the formal financial system universally require title for land registration as the principal if not the only allowable security to guarantee bank loans.⁴ As rural, inherited land is controlled and exclusively managed by male heads-of-household under customary property arrangements throughout much of rural sub-Saharan Africa, the vast majority of female farmers are excluded from credit extension institutions.⁴

Whereas documented adverse health impacts derived from gendered gaps in credit and losses to economic productivity and inefficiency associated with that deficits are prevalent in much of the developmental literature,⁵ downstream effects on female bodily integrity, health outcomes during maternal time, and rights regarding childbirth, childbirth, and birth control have rarely been addressed from either policy or academic viewpoints.⁶ In many poor and rural contexts where it operates, formal reproductive health care, including periodic medical checkups at ante-natal appointments, assistance during childbirth from trained attendants, emergency medical intervention during delivery, and acquisition of modern methods of birth control, relies upon the availability of liquid household funds.⁷ Loss of economic independent control via denial of financing due to formal legal strictures in agricultural credit laws and banking procedures serves to diminish female intra-household influence and ability to afford necessary reproductive health care.^{8,9}

In their interpretation of the connections between rights and health outcomes in relation to gender, the Maputo protocol and CEDAW articulate women's access to the resources necessary to exercise financial agency, possess ownership of assets, and access to loans to guarantee good health and gender equity.¹¹ Therefore it follows that understanding how existing, customary law on property ownership by gender, agricultural credit

² Donald, A., and Tafere, K. (2026). The agricultural gender gap in Sub-Saharan Africa: Magnitude, drivers, and policy directions (Policy Research Working Paper No. 11414). World Bank Group.

³ Akinola, A. O. (2018). Women, culture and Africa's land reform agenda. *Frontiers in Psychology*, 9, 2234. ⁴ International Finance Corporation. (2022). Closing the gender gap in agricultural finance: Legal and regulatory frameworks. World Bank Group.

⁴ Goldstein, M., and Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of Political Economy*, 116(6), 981–1022.

⁵ Beck, T., & Cull, R. (2011). Gender and finance in Sub-Saharan Africa: Are women disadvantaged? (Policy Research Working Paper No. 5571). World Bank Group.

⁶ Jacob, A. (2024, June 6). Barriers to land ownership create barriers to health for millions of women. *Global Health NOW*.

⁷ Azuh, D., Ogundipe, A., & Ogundipe, O. (2019). Determinants of women access to healthcare services in Sub-Saharan Africa. *The Open Public Health Journal*, 12(1), 504–514.

⁸ Quisumbing, A. R., Heckert, J., Faas, S., Feldstein, C. R., & Rubin, D. (2021). Women's empowerment, agricultural extension, and reproductive health outcomes: Evidence from rural Sub-Saharan Africa. *World Development*, 140, 105341.

⁹ Owoaje, E. T., Uchendu, O. C., Ajayi, T. O., & Cadmus, E. O. (2016). Maternal health services utilization among women in rural communities in southwestern Nigeria. *African Journal of Reproductive Health*, 20(4), 40–49. ¹¹ African Union. (2003). Protocol to the African Charter on Human and Peoples' Rights on the rights of women in Africa (Maputo Protocol).

law, formal banks' credit regulations, and female farmers' reproductive healthcare use interact with one another and the potential ways this legal regime impacts maternal health delivery and access among women in rural Sub-Saharan Africa requires analysis and study.¹⁰ This analysis will demonstrate how individual women can make decisions at the reproductive health phase within the framework of the established socio-economic and legal context of agricultural loan regulations and land ownership by gender.¹¹

2.0 Theoretical Framework

Based upon the three interconnected theories of Feminist Political Ecology, Capability Approach, and the Structural Determinants of Health model, this research examines the nexus of agricultural finance laws and reproductive health of women.

2.1 Feminist Political Ecology (FPE)

Feminist political economy is an approach that seeks to analyze the role played by gender relations in relation to access to, control of, and knowledge of both nature and economy. In the context of rural Sub-Saharan Africa, FPE argues that existing statutory agrarian finance laws and customary land tenure system are far from gender neutral but are founded on a patriarchal system which gives primacy to ownership and control by male users.¹² It states that denying women formal land ownership rights is more than a legal vacuum; the laws serve as structural instruments that exclude them from access to formal agrarian finance.¹³ Therefore, by using FPE this paper will analyze how land-related collateral requirements have the effect of disenfranchising women smallholder farmers, which in turn limits their economic capabilities and capacity to pursue their reproductive health decisions.¹⁴

2.2 The Capability Approach

Developed by Amartya Sen, and subsequently elaborated upon by Martha Nussbaum, the Capability Approach (CA) takes the objective of development away from income/economic growth towards the extension of human freedom and opportunity.¹⁵ Here, income (or assets such as an access to agricultural credit) is understood as an instrumental means to enable valued 'functionings' or states such as being in good health and being well-nourished. The inaccessibility of formal credit for rural women as a consequence of collateral constraints

¹⁰ United Nations General Assembly. (1979). Convention on the elimination of all forms of discrimination against women (CEDAW) (Treaty Series, Vol. 1249).

¹¹ Onarheim, K. H., Iversen, J. H., & Bloom, D. E. (2016). Economic benefits of investing in women's health: A systematic review. *PLOS ONE*, 11(3), e0150020.

¹² Razavi, S. (2003). Agrarian change, gender and land rights. United Nations Research Institute for Social Development (UNRISD).

¹³ Agarwal, B. (1994). *A field of one's own: Gender and land rights in South Asia*. Cambridge University Press.

¹⁴ Schenk-Sandbergen, L. (2024). Women and land rights in Lao PDR. *Treasure your matri heritage before it is too late! Where do we land up on gender equality?* *Gender Technology Development*, 28(1), 123–152.

¹⁵ United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development* (Resolution A/RES/70/1). United Nations General Assembly

results in direct loss of capability.¹⁶ Financial liquidity is required for women to transform labour into such resources such as paying for a round of antenatal care or for an ambulance to get to hospital.¹⁷ Under the CA then reproductive health cannot be just about medicine; it is to do with wealth and getting rid of all formal and informal blocking mechanisms which prevent women converting their labour into these resources.

2.3 Structural Determinants of Health

The World Health Organisation framework of the Social Determinants of Health highlights health disparities stemming from the unequal distribution of power, income, goods, and services¹⁸. Economic inequality reflects the consequences of upper-stream structures and contexts (i.e., legal, regulatory environments; governance systems; cultural factors) that define and determine people's economic status.¹⁹ This paper takes the legal environment of financial services and customary tenure rights as the upstream structural determinant defining women's socioeconomic status (or lack of asset and exclusion in the credit market) thereby creating intermediate determinant factors, for instance, household liquidity, bargaining power, etc. That influences women's behaviour and decisions regarding their health²⁰. The synthesis between these three frameworks will allow us to generate a complete and multiple dimensions view about how legal and finance arrangements translate to Health inequalities.²¹

3. Literature Review

3.1 Agricultural Finance and Gendered Credit Constraints

That there is a gender gap in agricultural financing is a commonly accepted fact and it has been observed widely in sub-Saharan Africa with significant inequalities between men and women in accessing the formal credit market.²²²³ Generally, the loan securities of both agricultural finance regulations and commercial banks demand real owned collateral which must be registered. Since a large percentage of women are precluded from formal property ownership of land, they are excluded from formal credit markets.

According to the International Finance Corporation's Gender and Finance Report of 2013, "eliminating this gender gap must occur through specifically created legal and regulatory structures which create new types of

¹⁶ Onarheim, K. H., Iversen, J. H., & Bloom, D. E. (2016). Economic benefits of investing in women's health: A systematic review. *PLOS ONE*, 11(3), e0150020

¹⁷ Allendorf, K. (2007). Do women's land rights promote empowerment and child health in Nepal? *World Development*, 35(11), 1975–1988

¹⁸ World Health Organization. (2023). Trends in maternal mortality 2000 to 2020: Estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division.

¹⁹ Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., & Roder-DeWan, S. (2018). High-quality health systems in the Sustainable Development Goals era: Time for a revolution. *The Lancet Global Health*, 6(11), e1196– e1252.

²⁰ Deere, C. D., and Doss, C. R. (2006). The gender asset gap: What do we know and why does it matter? *Feminist Economics*, 12(1–2), 1–50

²¹ Yaya, S., Uthman, O. A., Amouzou, A., and Bishwajit, G. (2019). Inequalities in maternal health care utilization in Sub-Saharan Africa: A multi-country analysis of Demographic and Health Surveys. *BMC Pregnancy and Childbirth*, 19(1), 1–10.

²² Donald, A., and Tafere, K. (2026). The agricultural gender gap in Sub-Saharan Africa: Magnitude, drivers, and policy directions (Policy Research Working Paper No. 11414). World Bank Group.

²³ . Beck, T., & Cull, R. (2011). Gender and finance in Sub-Saharan Africa: Are women disadvantaged

allowable collateral". Although laws like Secured Transactions in Movable Assets Act, 2008, intended to establish the use of movable property as collateral, grass roots implementation is poor and commercial banks still favor immovable property (land) on grounds of relatively lower risk of repayment and easier liquidation, consequently rendering female farmers dependent on informal high-interest money lenders or lack credit altogether for raising agricultural output and family income.²⁴

3.2 Customary Land Tenure and Statutory Law Conflicts

Land title versus customary right is at the root of rural African asset poverty for women. Often, statutory laws such as the Land Use Act ensure land ownership remains with the state, or with male household heads, whilst customary laws recognize inheritance and usage rights biased towards male interests. It has been debated for some time now that these customary rights to land create for millions of women such insurmountable barriers to Health and economic empowerment.²⁶

The "profit of power" in being able to hold ownership of land title drives males to continue to hold onto land titles so that their access to the formal economy remains dominant. Inherent to this is a legal system which means despite men owning the majority of agricultural land, it is men who hold their respective property title deeds and not women that may carry out most of the agricultural labor but are unable to use any of their landholdings as collateral.²⁵ Even the provision of agricultural advice to rural areas, which could potentially overcome such obstacles, remains focused on 'head of household' which is predominantly male led.²⁸

3.3 Reproductive Health and Economic Agency

Access to reproductive health care in rural areas is also sensitive to economic shocks and liquidity constraints. In Sub-Saharan Africa, maternal deaths and complications continue to be unacceptably high due to the "three delays" in seeking care: delay in seeking care, delay in arriving at health facilities and delay in receiving appropriate care.²⁶ Economic agency, through access to credit and own income, is key to reducing the first two delays. The greater a woman's control over the household's monetary resources, the more she is likely to spend on preventive care, including on antenatal care and modern contraceptives. Micro-finance and formal loans are known to increase usage of maternity care by ensuring the necessary cash is available to pay the often substantial out-of-pocket expenses. Moreover, through empowerment women's in-household decision making ability can be augmented so that women can make claims on family resources to pay for the transport needed during emergencies and for more costly skilled care rather than rely on traditional birth attendants during difficult births.²⁷

²⁴ African Development Bank. (2023). AFAWA: Affirmative finance action for women in Africa. AfDB Group. ²⁶ Jacob, A. (2024, June 6). Barriers to land ownership create barriers to health for millions of women. Global Health NOW.

²⁵ Akinola, A. O. (2018). Women, culture and Africa's land reform agenda. *Frontiers in Psychology*, 9, 2234 ²⁸ Doss, C., Meinzen-Dick, R., Quisumbing, A., & Theis, S. (2018). Women in agriculture: Four myths. *Global Food Security*, 16, 69–74.

²⁶ Abor, P. A. (2011). Improving maternal healthcare utilisation in sub-Saharan Africa through micro-finance. *International Journal of Health Care Quality Assurance*, 24(8), 601–610.

²⁷ Okonofua, F., Ntoimo, L., Ogunbangbe, J., Anjorin, S., Imangan, W., & Simonbaia, S. (2018). Where women deliver and who attends their deliveries in rural Nigeria. *African Journal of Reproductive Health*, 22(2), 82–93.

3.4 The Intersection of Agricultural Extension, Finance, and Health

Agricultural extension is a key element of rural development that does not systematically incorporate financial literacy and reproductive health education.^{28,29} The relationship among water, energy, land, and food security underscores the interrelated nature of rural resources and argues that approaches need to be systems-oriented instead of being disconnected.³⁰ Beliefs regarding women in agriculture in which they are viewed as free female farm labor rather than free-standing agents and actors impedes the construction of gender-sensitive extension programs. Taking into account the non-land farm assets and technology for which women have access and making it a bridge between them and other alternative forms of credit will assist the integration of financial education within agricultural extension.³¹ A holistic approach to agricultural extension, financial inclusion, and reproductive health and well-being is therefore synergistically linked to efforts at all-Africa level to reduce maternal mortality and reach the SDGS.

4. Methodology

4.1 Study Design and Area

A cross-sectional, mixed-methods approach was chosen in order to capture the breadth of data needed for a statistical picture, and the contextual nuances of the research problem. The study was carried out in 3 essentially agrarian local council areas in the geographic vicinity of Nigeria (within a Nigerian jurisdiction, given the laws we focus on in this study) in West Africa. This area was chosen on purpose because of the high concentration of rural inhabitants, intensive farming activities, and established contextually evident constraints on credit access to rural smallholder farmers. Being a region within a double legal system featuring statutory banking legislation and entrenched customary land tenure practices, this presented a unique backdrop for researching law, finance, and health interactions.

4.2 Population and Sampling Procedure

The population for this study was women smallholder crop producers. A multi-stage sampling design was adopted to carry out this study. At the first stage, three agrarian local council areas were sampled. At the second stage, fifteen (15) rural farming communities were selected from the selected councils through stratified sampling procedure. At the third stage, four hundred and fifty (450) women smallholder crop producers were selected using the membership registers of registered farmers' cooperative groups in the communities with the help of systematic sampling methods to ensure some familiarity with agricultural systems and exposure to credit markets.

²⁸ Hlahla, S. (2022). Gender perspectives of the water, energy, land, and food security nexus in sub-Saharan Africa. *Frontiers in Sustainable Food Systems*, 6, 719913.

²⁹ . Food and Agriculture Organization. (2023). The status of women in

³⁰ Doss, C., Meinzen-Dick, R., Quisumbing, A., & Theis, S. (2018). Women in agriculture: Four myths. *Global Food Security*, 16, 69–74.

³¹ Peterman, A., Behrman, J. A., & Quisumbing, A. R. (2014). A review of empirical evidence on gender differences in nonland agricultural assets, technology, and services in developing countries. *Journal of Agricultural Economics*, 65(2), 417–441.

4.3 Data Collection Instruments and Procedures

Quantitative data were collected using in-depth, face-to-face structured interviews conducted by female trained enumerators to reduce bias and facilitate ease of sharing of information related to the topic, which is sensitive to many people. The questionnaire contained socio-demographics of participants, their credit application history and status of ownership of legal documents for agricultural land. It also contains main variables of interest which are antenatal visits (number), location of delivery of baby, adoption of modern contraceptive methods and out-of-pocket expenditure of the household on medical-related expenditures. Qualitative data was collected from 18 key-informant interviews (KIIs). Informants were agricultural Extension officers, Microfinance institution heads/ managers, the legal practitioner for land and Banking law, and Director of the Public Health department. They responded to open-ended questions in a semi-structured KII protocol that allows probing.

4.4 Data Analysis

Quantitative data analyses were conducted using descriptive statistics to characterize the sample's demographic and credit-related attributes. Chi-square tests were performed to assess categorical associations between the land ownership/credit status and reproductive health indicators. Multivariable logistic regression models were used to assess the independent relationship between access to formal credit and reproductive health service use, after adjusting for potential confounders including mother's age, parity, household income, and educational level. KII qualitative data were transcribed and, as needed, translated then underwent thematic analysis in order to identify recurring themes concerning legal constraints, financial exclusion, and health consequences.

4.5 Ethical Considerations

The research was approved by the State Ministry of Health Health Research Ethics Committee (Approval number: MH/EC/2024/412). Informed written consent was taken from all the participants before the administration of questionnaires. A thumbprint endorsement by a nonliterate was used along with an independent witness. Participation in the study was voluntary, and the participants were assured they had the right to withdraw their participation at any time without any reprisal. The data were de-identified.

5. Results

5.1 Socio-Demographic and Land Ownership Characteristics

Analysis of the socio-demographic characteristics of the 450 women respondents indicates a majority of poor and less-educated women from an agrarian rural context. Critically the gendered aspect of asset ownership was found to be a significant issue of inequality. A staggering 419 women out of the 450 surveyed, constituting as high as 11.3%, did not own the farm land on which they practice agriculture and hold legal titles/deeds of the land. These women mostly use family owned agricultural land registered in the name of male relatives and/or leased on a notional/rent based system where there is no formal registration of the ownership.

5.2 Credit Application and Approval Rates

Formal finance-in despite a great demand for an appropriate agricultural sector “investment material” remained off the agenda. Although 307 respondents (68.2%) have applied for formal financing for their agriculture during the last three years, only 83 women (18.4%) are successful in receiving an institutional loan. The failure to obtain it is due to the fact that almost three quarters of loan applications were denied on formal legal grounds to meet collateral requirement that require ownership titled to the land, which only accounted for 82.1 % for rejected applications among microfinance manager and legal experts in the KIIs, who confirmed that their “standard risk assessment models of Banks only approve collateral as the bank’s loans as registered and immovable property.”

5.3 Reproductive Health Outcomes

The discrepancy between the reproductive health statuses of women that had received formal credits/had land titles and those who had not, was evident, and quite striking. As indicated in the Table-1, Maternal Health Indices(MHI) of the women to whom formal credit and entitled land(s) were given, were as much higher to those who were deprived of such benefits, which is statistically sound.

Table 1: Reproductive Health Outcomes Categorized by Credit and Land Ownership Status (N=450)

Outcome Variable	Titled LoanApproved Women (n=83)	Non-Titled / Credit-Excluded Women (n=367)	ChiSquare (χ^2)	pvalue
Completed Antenatal Care Visits	68 (81.9%)	159 (43.3%)	40.12	<0.001
Facility-Based Delivery	74 (89.2%)	188 (51.2%)	40.85	<0.001
Current Modern Contraceptive Use	52 (62.7%)	114 (31.1%)	29.18	<0.001
Catastrophic Out-of-Pocket Health Cost	10 (12.0%)	215 (58.6%)	59.41	<0.001

The data reveals that 81.9% of credit-accessed women completed the recommended four or more antenatal care visits, compared to only 43.3% of credit-excluded women ($\chi^2 = 40.12$, $p < 0.001$). Similarly, facility-based delivery rates were nearly double among the credit-accessed group (89.2% vs. 51.2%, $\chi^2 = 40.85$, $p < 0.001$). Modern contraceptive adoption was significantly higher among women with financial access (62.7% vs. 31.1%, $\chi^2 = 29.18$, $p < 0.001$). Conversely, the burden of catastrophic out-of-pocket health costs fell disproportionately on the credit-excluded group, with 58.6% experiencing such financial shocks compared to only 12.0% of the credit-accessed group ($\chi^2 = 59.41$, $p < 0.001$).

5.4 Multivariable Logistic Regression Analysis

In the conditional logistic regression model after adjusting for mother's age, parity, household income and level of education the female farmers having obtained a formal credit had significantly higher odds to have attended maternal health care professionals. They had more than three times higher Odds ratio to have received skilled delivery care (Adjusted Odds Ratio [AOR]=3.42; 95% CI=2.01 to 5.82; $P < 0.001$), and also more than twice higher Odds ratio to use a method of modern contraception (AOR=2.31; 95% CI=1.41 to 3.78; $P = 0.001$). This showed clearly that the relationship between formal credit and health outcomes held after controlling basic sociodemographic confounders.

5.5 Qualitative Findings

The qualitative storytelling in the KIIs and open-ended responses filled in the statistical story. Agricultural extension officers and microfinance managers underscored commercial banking law as significant rural public health structural determinants, arguing that since it requires titled land property for any mandatory collateral, laws already embed historic gender biases into their operations. Women who are excluded by credit were reporting significant cash flow shortages when planting crops or when their income stream is about to start, namely during pre-harvest time which often left them deferring routine antenatal consultations to the last possible minute or to traditional birth attendants for emergency deliveries when they lack liquid cash for facility-based care/emergency transportation to the facility. According to one legal analyst, there already exists legislation in the form of the Secured Transactions in Movable Assets Act, but commercial banks seem unwilling to uptake due to insufficient uniform standards of valuing movable assets to collateralise. This leaves women stuck within the current land ownership framework.

6. Discussion

Overall, this paper provides convincing empirical evidence of how the legal and financial regulatory frameworks of commercial agricultural banking acts as a powerful-yet indirect structural driver of rural public health.³² In requiring titled land as indispensable collateral for access to credit, current regulations perpetuate historically grounded and pervasive gender inequalities rendering rural women dependent on male counterparts. These inequalities create constraints on female agency by curtailing their access to liquidity to finance and make personal reproductive choices.

These findings demonstrate how access to financial resources, whether through ownership of collateralized assets like registered land or direct formal sector credit, enables maternal financial agency and ultimately access to maternal health care, as suggested by dramatic health disparities among credit-accessed and excluded

³² Deere, C. D., and Doss, C. R. (2006). The gender asset gap: What do we know and why does it matter? *Feminist Economics*, 12(1–2), 1–50.

women.^{33, 34}

The excessive high rate of catastrophic health spending in the credit excluded cohort (58.6%) underscores how easily health shocks can trigger household poverty leading to “three delays” characterizing maternal deaths in Sub-Saharan Africa.³⁵ The qualitative interviews highlight how current reforms like the Secured Transactions in Movable Assets Act are having limited on-the-ground impact; that, in fact commercial banks continue to rely on land collateral, because of a general lack of institutional readiness for and a risk mitigation framework that accounts for-and discounts for-the value of movable asset collaterals, and that women (with significantly more movable assets than land) are excluded.³⁶

A cross sectoral analysis at the juncture of agricultural extension finance, and women’s reproductive health also emerged as a key area of policy engagement; to strengthen women’s capacity to achieve outcomes like good health for themselves and their families this requires expanding women's range of freedoms (Capability Approach to development-and in this case reproductive health, financial and land based legal rights).³⁷ Acknowledged limitation of the cross sectional nature of research implies caution with regards to asserting causal inferences from legal credit barriers and reproductive health decision making, but robust statistical associations provide a strong case for policy reforms.³⁸

Geographic differences in norms relating to the enforceability of informal and customary law may contribute to variability in the relationship between legal access barrier and financial inclusion across regions within the sample population; and a natural extension for future work are longitudinal studies tracking longer run outcomes of legal and financial reforms.

7. Conclusion

An agricultural financing legal regime-its enactment, implementation or assessment-cannot function outside its public health implications. The study provided evidence and discussed how a legal regime by virtue of a statutory, binding, and non-discretionary legal rule placing land at the center of agricultural credit effectively denies access to finance for female smallholders. This deprivation has a series of negative downstream implications to women by undermining women's economic autonomy, intra-household bargain power, and ultimately women's access and use of reproductive health services. Indeed, it is crucial to implement structural interventions, especially now that the results clearly show very high proportions of out-of-pocket health expenditures and low utilization of skilled maternal care by credit-excluded women, if the reformative statutory

³³ Owoaje, E. T., Uchendu, O. C., Ajayi, T. O., & Cadmus, E. O. (2016). Maternal health services utilization among women in rural communities in southwestern Nigeria. *African Journal of Reproductive Health*, 20(4), 40–49.

³⁴ World Bank. (2024). *Women, business and the law 2024*. World Bank Group.

³⁵ Federal Republic of Nigeria, 2017

³⁶ Peterman et al., 2014

³⁷ Doss et al., 2018

³⁸ Onarheim et al., 2016

laws, for instance, that will remove land collateral requirements, support diverse forms of property (as collateral) and ensure equal access to credit are put in place. Through the integration of credit laws with national public health goals, it provides rural women who work the land a safeguard against financial risk in periods of sickness, while enhancing national efforts on the continent to mitigate the rates of maternal morbidity and to achieve the MDGs.

8. Recommendations

From the empirical results and theoretical insights discussed above, a four detailed and comprehensive recommendations could be generated in the following terms

1. **Legislative Reform of Collateral Requirements:** Legislators and central banks should revise banking laws and mandate, via binding regulations, a greater acceptance of non-land collateral. This may include movables, warehouse receipts, crop lien forms, and group-guarantee schemes. Regulators should define standard criteria for valuation of these alternative collateral forms in order to minimize bank risk-aversion with a focus on promoting financial products to women within agricultural cooperatives.
2. **Promote Legal Joint-Titling Frameworks:** National land registry agencies and national policy bodies should also establish subsidized, simple legal processes for enforcing the joint titling of farmlands of married women/men. Customary land reform initiatives need also to be reformed to establish, enforce and protect the right of individually owned land in women-headed households with no need to bypass male middlemen.
3. **Integration of Financial and Reproductive Health Services via Agricultural Extension:** Agriculture, Gender Affairs and Health ministries ought to put heads together to reform agricultural extension approaches so that agents undertake the combined extension on credit facilitation and maternal health education, legal training on land property and directly link to family planning in an inclusive package.
4. **Establishment of Gender-Responsive Credit Guarantee Funds:** The State should create genderspecific credit guarantee funds with the help of development finance institutions to provide credit access for female smallholder farmers, and partially cover the commercial risks encountered by commercial banks to lend to women without traditional forms of collateral in an effort to close the gap between written law and lending and also develop a culture for financial inclusion.

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