

# Women's Property and Inheritance Rights and HIV in Farming Communities around Lake Victoria, Northwestern Tanzania

## A Quantitative Analysis

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**MEASURE** Evaluation–Tanzania  
TCRS Building,  
1st Floor, Plot No. 436, Mwai Kibaki Road,  
Mikocheni B.

Dar es Salaam, TZ  
+255 22 277 3023

[www.measureevaluation.org/tanzania](http://www.measureevaluation.org/tanzania)

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## ABBREVIATIONS

BAPTC	Bugogwa Amani Post-Test Club
CBO	community-based organization
FGD	focus group discussion
ICRW	International Center for Research
ILO	International Labour Organization
KONGA	Kongamano la Watu wanaoishi na Virusi Vya Ukimwi
LHRC	Legal and Human Rights Centre
MRCC	Medical Research Coordinating Committee
NACOPHA	National Council of People Living with HIV/AIDS in Tanzania
NGO	nongovernmental organization
NIMR	National Institute for Medical Research
OCGS	Office of the Chief Government Statistician
PLHIV	people living with HIV
SSA	sub-Saharan Africa
TACAIDS	Tanzania Commission for AIDS
TzPPA	Tanzania Participatory Poverty Assessment
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNECA	United Nations Economic Commission for Africa
WAWAVUMA	Watu Waishio na Virusi vya Ukimwi Magu
WPIR	women's property and inheritance rights
WLHA	widows living with HIV and AIDS
ZAC	Zanzibar AIDS Commission

## EXECUTIVE SUMMARY

**Background:** Despite the growth of HIV prevention efforts, infection rates in sub-Saharan Africa remain high. Tanzania has one of the highest prevalence rates in the world, at 5.1 percent among 15–49 year olds, according to the *2012 Tanzania HIV/AIDS and Malaria Indicator Survey*. The HIV prevalence rate in Tanzania is much higher among women (6.2%) than men (3.8%). The spread of HIV and AIDS is shaped by economic, political, and social factors, particularly gender issues, such as violence against women in all its forms. Widowhood often involves discrimination, deprivation, and suffering. Many women lose their property and other assets following the husband's death. Property inheritance is always the prerogative of the deceased man's male kin. The practice of wife inheritance forces the widow to marry her brother-in-law or another male in her late husband's family. The practice of sexual cleansing or purification forces her to engage in unprotected sex with a male in-law.

**Objective:** Our study was designed to establish the causal relationships between women's property inheritance rights and HIV and AIDS, by researching the experiences of widowed women living with HIV and AIDS (WLHA) in smallholder farming communities around Lake Victoria, in Tanzania.

**Methods:** Questionnaires were completed during interviews with 52 women living with HIV and supported by two community-based organizations in Ilemela and Magu districts. (We conducted final analysis on 36 women, after eliminating those who knew their husband's HIV status before they died.) We also conducted four focus group discussions (two in each district), with eight participants in each group. Half of the focus groups involved widows, and half involved inheritors. We constructed a conceptual framework for concurrent analysis of HIV progression and its influence on the lives of women and their marital families.

**Findings:** Most of the widows in our study (69.4%) were immediately inherited after the death of husbands. Most of them (88.9%) were not forced to have sex with the inheritors, but still may have engaged in risky sexual behavior. More than two-thirds of the inheritors (66.7%) did not use condoms, and in most cases (61.7%), the inheritor's HIV-positive status was not known to the widow. Most widows (81.8%) were unaware of the HIV status of the ritual cleanser and a condom was not used in sex with him. Moreover, 14 of the 36 widows (38.8%) were involved in transactional/casual sex in order to receive monetary or material gain, and five of that group (36%) did not use a condom. Almost half of the widows (47.2%, usually ages 18–35) were inherited mainly for childbearing. In other cases, widows were inherited for sexual companionship and ritual sexual cleansing purposes.

Social, economic, and cultural factors influenced inheritance decisions for individuals and communities. We found that monthly income of widows was a factor, much more so than location, educational level, religion, and occupation. Most of the widows lost their household assets immediately following the husband's death. These widows lost land (58%), houses (38.9%), and livestock (16.7%). Most study participants were unaware of widows' rights to inherit property and male dominance continues to perpetuate wife inheritance.

**Conclusion:** Women living with HIV in rural Tanzania continue to be at risk because of inadequate social, economic, legal, and emotional support. Social exclusion and the erosion of asset bases reinforce their vulnerability. Our study revealed a deep, complex set of social and economic challenges that need to be addressed with innovative strategies to ameliorate gender-based stereotypes that disempower women. We offer six recommendations for interventions designed to strengthen the role of WLHA, and to reduce the incidence of transactional sex, gender-based violence, and other societal HIV risk behaviors.

## BACKGROUND

In spite of numerous efforts to prevent the spread of HIV, infection rates in sub-Saharan Africa (SSA) remain high (Oluga, Kiragu, Mohamed, & Walli, 2010). Tanzania has one of the highest HIV prevalence rates in the world, at 5.1 percent among people ages 15–49, according to the latest indicator survey (Tanzania Commission for AIDS [TACAIDS], Zanzibar AIDS Commission [ZAC], Office of the Chief Government Statistician [OCGS], & ICF International, 2013). Women have a much higher rate (6.2%) than men (3.8%).

The HIV epidemic in Tanzania is shaped by economic, political, and social factors. Gender inequality, violence against women, and alcohol abuse among men are contributing to the problem. Poverty and transactional sex (with increasing numbers of sex workers), are also driving the HIV epidemic in sub-Saharan Africa (Jewkes, et al., 2012). In addition, cultural practices in Tanzania surrounding widowhood and spouse mobility (which increases temporary sexual relationships) contribute to the spread of HIV and other sexually transmitted infections (Legal and Human Rights Centre & Zanzibar Legal Services Centre, 2013).

Concerns over violations of the human rights of widows have increased in the wake of the HIV epidemic. An increase in the absolute number of widows is partially attributed to HIV. Infection and disease are blamed for impoverishing a household prior to the husband's death, leaving a widow few resources with which to resist extended-family pressures regarding inheritances (Drimie, 2002). The International Center for Research on Women (ICRW) (2004) argues that, when women have weak property rights, they are unable to secure resources that would allow them to improve their chances of preventing infection, even before the dissolution of a marriage or death of a spouse.

Widowhood in SSA often leads to poverty and food insecurity for widows and their children. In Southern Africa, 60 percent of smallholder farmers are women; they represent 75 percent of the food production and processing workforce (United Nations Economic Commission for Africa [UNECA], 2003). Women rarely own or have control over the land they cultivate. Many widows in SSA experience discrimination, deprivation, and suffering. They often lose property and other assets following their husbands' deaths. Property inheritance, particularly land and other productive assets, is always the prerogative of the deceased man's male kin.

Denial of individual rights within marriage may increase women's vulnerability to domestic violence, unsafe sex, and other HIV-related risk factors. One study shows that widows may face several harmful customary practices, such as widow inheritance and ritual cleansing (Peterman, 2009). The practice of widow inheritance requires the widow to marry a male relative of her late husband, often his brother. The ritual cleansing or purification practice forces the widow to engage in unprotected sex with one of the late husband's male relatives. Addressing the spread of HIV is especially relevant where males engage in ritual cleanses with many widows, a common practice throughout SSA (Perry, et al., 2014).

Property rights are associated with women's ability to make choices for their future economic support. It is not surprising that the lack of women's property and inheritance rights (WPIR) has been cited as a major issue in rural poverty that fuels the spread of HIV.

The majority of evidence surrounding wealth dynamics at widowhood is based on qualitative research, case studies, anecdotes, or the popular press, and is often framed in a human rights or legal perspective. An in-depth study of property rights violations in Kenya recounted many stories of women excluded from



inheriting assets (including land and livestock), evicted from their property by in-laws, dispossessed, and forced to engage in risky sexual practices (Mugambi, 2006), such as ritual cleansing (Perry, et al., 2014), because of inadequate or nonexistent legal and judicial protections (Sadurski, 2002). Another study (Izumi, 2007) defined asset disinheritance as a form of gender-based violence, and documented stories of widows who were humiliated or died defending their property. While qualitative studies are emerging, quantitative research is needed to improve the evidence base.

Laws in Tanzania do not sufficiently recognize women's rights to own and inherit property. Despite government efforts to address practices that contribute to poverty or ill-being, these problems persist. Policies have been proposed to improve the status of women, but they have not been enacted or effectively implemented (McCloskey, et al., 2005). Widows continue to experience dispossession of the husband's property, even when his will instructed giving the property to his wife (Tanzania Participatory Poverty Assessment [TzPPA], 2003). The country's administration and governing bodies have continued discriminatory proprietary laws and practices that were established during British colonization (Walker, 2002).

In 1999, Tanzania passed one of the most radical land laws in Africa. The law shifted land administration to the village level, where each community is in charge of registration, adjudication, titling, and land disputes (Peterman, 2009). This was primarily done to prevent outside appropriation of land, and keep all disputes in communities. The secondary reason was to promote the operation of a market in land rights. An evaluation of the effectiveness of these laws indicates mixed results. The Tanzania Human Rights Report 2012 (Legal and Human Rights Centre [LHRC] & Zanzibar Legal Services Centre [ZLSC], 2013) confirmed that tribes still practiced property customs that harm the well-being of widows, such as widow inheritance and ritual cleansing. Widow cleansing remains common in Makete District in Njombe Region, and is widely prevalent in the Lake Zone regions, which are characterized by a continuum of traditional property ownership and inheritance patterns at the household level.

Loss of male household heads because of HIV usually increases the complexity of transferring wealth to eligible individuals, particularly widows and children, who are already disenfranchised. While access to and control over assets can minimize women's HIV risk, little is known about the processes through which property rights violations increase the sexual transmission of HIV. Studies of associations between marriage and HIV acquisition among women in SSA are generally inconclusive. Not enough is known about HIV risks among divorced and widowed women. One study (Tenkorang, 2013) revealed higher risks of HIV among divorced women compared to never-married women. Another study (Tumlinson, Thomas, & Reynolds, 2014) confirmed that the relationship between WPIR and HIV transmission is not well understood. Quantitative evidence is limited regarding the extent to which widows who lost their rights to household properties and assets after their husbands died were likely to transmit or receive HIV.

Inheritance discrimination and human rights violations against widows have been documented extensively across diverse geographic and cultural settings. Research also shows that discriminatory cultural practices increase vulnerability to HIV (Oluga, et al., 2010). The incidence of HIV will not be reduced significantly unless the risk factors and gender dimensions in WPIR are fully understood, and gender-responsive interventions are developed.

## Study Rationale

Empirical evidence surrounding WPIR and HIV from an economic development perspective is lacking. Studies of associations between marriage and HIV acquisition among women in SSA are inconclusive. Although Tenkorang (2013) revealed higher risks of acquiring HIV among divorced women compared to never-married women, not enough is known about HIV risks among divorced and widowed women. The relationship between WPIR and HIV transmission is not well understood. Quantitative evidence is limited regarding the extent to which widows who lose their rights to household properties and assets after the death of their husbands experience increased vulnerability to HIV transmission.

## Study Objective and Research Questions

Our objective was to establish causal relationships between WPIR and HIV in Tanzania. We sought to answer the following questions:

- To what extent does violation of WPIR contribute to transmission of HIV among women? Specifically, what are the patterns of asset disinheritance among widows living with HIV?
- Is there a correlation between WPIR and HIV transmission in smallholder farming communities around Lake Victoria in Tanzania? Specifically, is there a correlation between violation of WPIR and seropositive HIV status?
- Do HIV-positive widows experience changes in household-level asset stocks as a result of property disinheritances? Specifically, what is the magnitude and trend of asset expropriation among widows living with HIV?
- What are the institutional and community-based support strategies for WPIR in smallholder farming communities around Lake Victoria in Tanzania?
- What are the structural challenges to integrating multiple gender strategies that promote property and inheritance rights of widows living with HIV in smallholder farming communities around Lake Victoria in Tanzania?

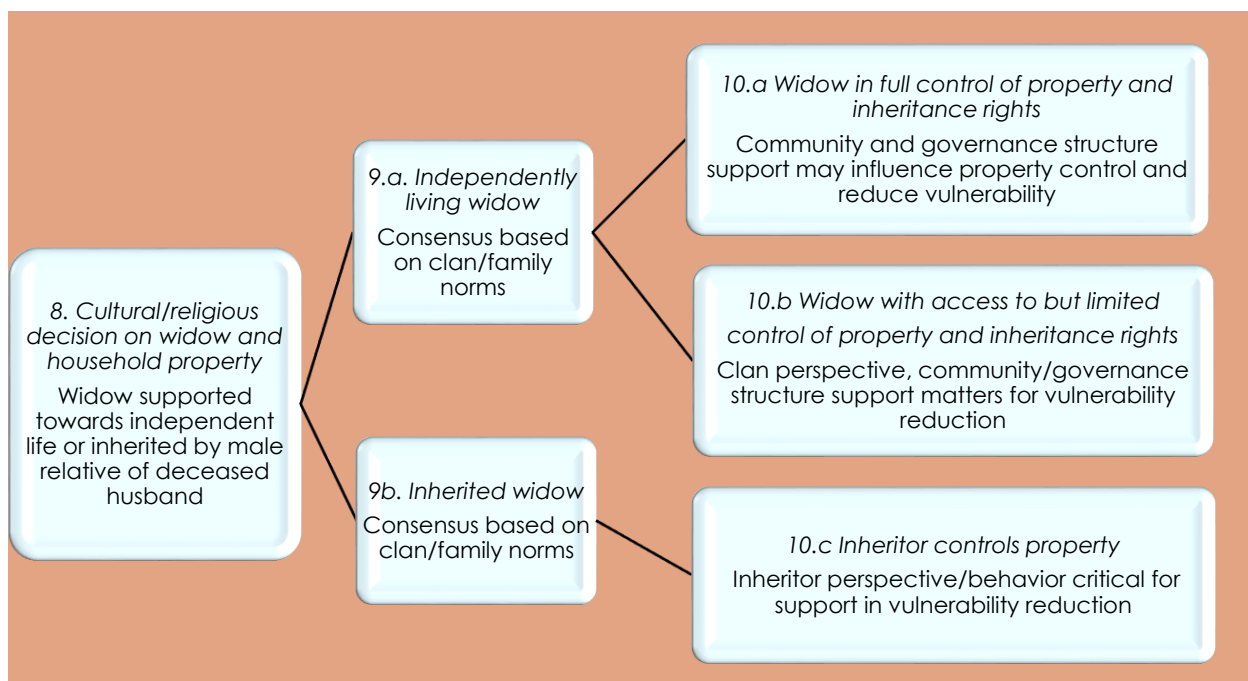
## **METHODS**

### **Conceptual Framework for Concurrent Analysis of HIV**

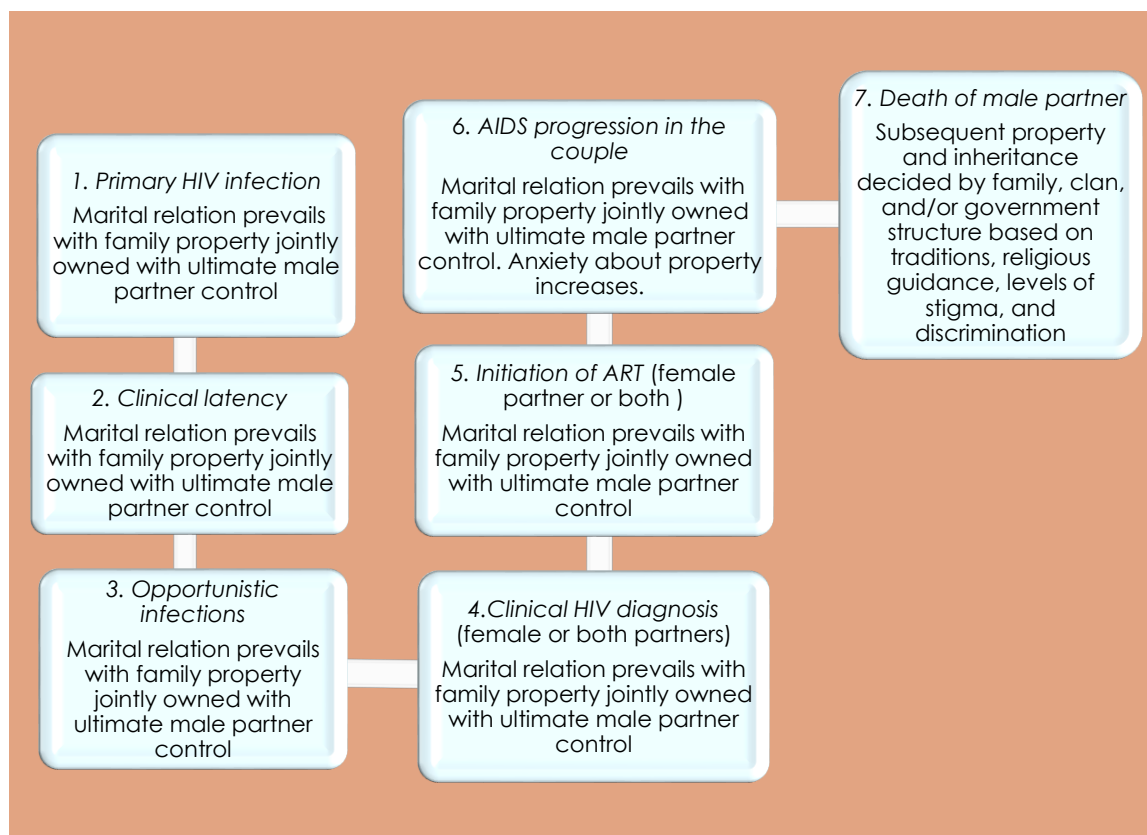
We constructed a conceptual framework (Figure 1) for concurrent analysis of HIV progression and its influence on the lives of women in their marital families. This two-stage conceptual framework illustrates the pathway for an HIV-positive woman from the time she acquires HIV to the time she loses her male partner to the vulnerability she then experiences when her property and inheritance rights are threatened.

**Figure 1. Conceptual framework for analysis of progression of HIV infection and WPIR**

**Stage 1**



**Stage 2**



## Data Collection

### Questionnaire

A structured questionnaire was designed in English, translated into Kiswahili, pretested, and administered in personal interviews with women in smallholder farming communities in Ilemela and Magu districts in Mwanza Region, Tanzania. Two data collectors (one female and one male) were trained to administer the questionnaire while adhering to ethical standards.

Two community-based organizations (CBOs) that support people living with HIV (PLHIV) at the district level, commonly known as “*Kongamano la Watu wanaoishi na Virusi Vya Ukimwi*” (KONGA),<sup>1</sup> were selected to assist with recruiting respondents for the study. Two official CBO representatives, one from Watu Waishio na Virusi vya Ukimwi Magu (WAWAVUMA)<sup>2</sup> in Magu District, and another one from Bugogwa Amani Post-Test Club (BAPTC) in Ilemela District, were asked to provide lists of women living with HIV who are members of the CBOs. From these lists, study investigators randomly selected inherited widows for the study. In Ilemela District, among 250 women on the list, BAPTC identified widows, and 25 of them were chosen to participate in the study. In Magu District, among 843 women, WAWAVUMA identified widows, and 27 of them were chosen to participate in the study. All 52 of the recruited widows consented to participate in the study. Thirty-six women included in the study’s final analysis met the following inclusion criteria:

- They were HIV-positive.
- They were widowed.
- They knew the date their husbands had died.
- They did not know the HIV status of their late husbands.
- They were inherited.

We used IBM SPSS Statistics to identify those widows who knew they were HIV-positive before the death of their husbands. At the analysis phase, 16 respondents were excluded, because they had already tested positive before they were widowed, reducing the number of participants to 36 widows. An alpha level of 0.05 was used for all statistical tests.

Study participants met individually with the trained research assistants. Data collection for the interview questionnaire had been conducted during the CBOs’ ordinary meetings with members, and the individual widows who attended the meetings were randomly selected for the interviews. An informed consent form was read to the participants before the interviews, assuring each participant that their identities would remain confidential. Individual participants were asked to sign the consent form if they agreed to continue with the interview. The two research assistants conducted the interviews using the structured questionnaire.

### Focus Groups

We also used focus group discussions (FGDs). A total of 32 people were involved in four focus group discussions, two in each district. Two of the FGDs were conducted with eight widows each, all of whom had previously been interviewed. Two additional FGDs comprised eight inheritors each. A checklist of

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<sup>1</sup> This means a cluster of people living with HIV and AIDS established by the National Council of People Living with HIV/AIDS in Tanzania (NACOPHA) in each district council in Tanzania.

<sup>2</sup> This is Kiswahili for “people living with HIV” in Magu District.

questions was used for the FGDs and the gathered information was triangulated with the individual responses of the interviewed widows.

## **Data Processing and Analysis**

We used IBM SPSS Statistics (Version 20) for data entry and subsequent analysis. Univariate analyses were used to obtain summary statistics and bivariate analyses were used for cross tabulation (chi-square). A t-test of independence was used to determine if associations existed between two variables by examining the respective pattern of responses. Calculating the chi-square statistics and comparing them against the critical value from the chi-square distribution allowed an assessment of whether the association seen between the variables in the sample likely represents an actual relationship between those variables in the population.

Thematic quantitative analysis was used to analyze the marital outcome (widowhood) and asset accumulation (or inheritance) after the death of a spouse in relation to HIV status. The study partly adopted the framework developed by Deere (2006) and Doss (2009) to examine the gender asset gap applied to specific cases of WPIR linked to their HIV status. We linked data sets on the perceived influence of cultural practices (such as wife inheritance) on HIV risk, to social and economic data sets through which a loss of property rights was perceived to influence primary and secondary transmission of HIV. The variables in the data sets included loss of income, livelihood, and assets. Other common variables were markets or beaches where sex was exchanged for food, money, shelter, clothing, or other goods.

Primary data analysis included variables on property ownership, property rights violations, prevention of disinheritance, and asset stripping among widows living with HIV. The chi-square statistic was used to establish a causal relationship between variables, such as WPIR and HIV.

## **Ethical Clearance**

The study protocol and data collection tools were approved by the National Health Research Ethics Review Committee under the Medical Research Coordinating Committee (MRCC) of the National Institute for Medical Research (NIMR). The MRCC is the national health research coordinating body that ensures all health research follows country's ethics requirements.

## RESULTS

Of the 52 HIV-positive widows who consented to participate in the survey, 16 (31%) knew their HIV status before they were inherited. These were excluded from the analysis, because they were already HIV-positive before their husbands died. Table 1 shows the sociodemographic profile of the remaining 36 respondents. Sixty-four percent of the studied widows were older than 35 years of age, 81 percent had completed primary school education, and 86 percent were smallholder farmers living on less than Tsh 50,000 (about US\$23) per month.

**Table 1. Sociodemographic profile of WLHA**

Characteristics (n=36)	Frequency	Percentage
<b>Age</b>		
18–35 years	13	36
More than 35 years	23	64
<b>Education</b>		
No schooling	6	17
Primary education	29	81
Secondary education	1	3
<b>Main occupation</b>		
Farming	31	86
Non-farming	5	14
<b>Average income per month in Tsh</b>		
Less than 50,000	31	86
50,000–100,000	3	8
More than 100,000	2	6

### Widow Inheritance and HIV Transmission

Most of the widows (69.4%) were immediately inherited after the death of their husbands and were not forced to have sex with their inheritors (88.9%). Most widows (61.1%) knew the HIV status of their inheritors. More than two-thirds of the inheritors/ritual cleansers (66.7%) did not use condoms during sex with the inherited widows. Among the widows who knew their inheritors' HIV status, about one-fifth (20.8%) did not use a condom. Overall, sex with inheritors without the use of a condom was twice as common as sex with a condom.

In order to establish a relationship between widow inheritance and HIV transmission, a chi-square test was performed (see Table 2). Responses from 36 inherited widows were analyzed using an alpha level of 0.05 for all statistical tests. We found an association between condom use by the inheritor/ritual cleanser and the widow's awareness of the ritual cleanser's HIV-positive status. The *p*-value indicates that these variables are dependent on the population and there is sufficient evidence to show a significant linear relationship between condom use by the inheritor or ritual cleanser and the widow knowing the inheritor's HIV status, because the correlation coefficient is significantly different from 0.

**Table 2. Condom use by the inheritor and the widow's knowledge of the inheritor's HIV status**

		Knowing HIV status of inheritor		Total	Chi-square test		
		Yes	No		$\chi^2$	df	p-value
Condom use by inheritor	Yes	7 (58.3%)	5 (41.7%)	12 (100.0%)	5.063	1	0.024
	No	5 (20.8%)	19 (79.2%)	24 (100.0%)			

We also performed a chi-square test to establish a relationship between a widow's immediate inheritance after a husband's death, her knowledge of the inheritor's HIV status, use of a condom during transactional/casual sex, and forced sex by the inheritor (see Table 3). We found an association between a widow's immediate inheritance after a husband's death and not knowing the HIV status of the inheritor. The  $p$ -value ( $p = 0.041$ ) indicates that these are dependent variables, and there is sufficient evidence to conclude a significant linear relationship between a widow not knowing the HIV status of her inheritor and the immediate inheritance of a widow after the death of her husband, because the correlation coefficient is significantly different from 0. We did not find a significant relationship between the other variables.

**Table 3. Correlations between inheritance and HIV status, forced sex, and condom use**

		Immediate widows' inheritance after husbands' death			Chi-square test		
		Yes	No	Total	$\chi^2$	df	p-value
Knowing HIV status of inheritor	Response						
	Yes	11 (30.6%)	1 (2.8%)	12 (33.3%)	4.189	1	0.041
	No	14 (38.9%)	10 (27.8%)	24 (66.7%)			
Total		25 (69.4%)	11 (30.6%)	36 (100.0%)			
Using condom during transactional/casual sex	Yes	6 (22.2%)	3 (11.1%)	9 (33.3%)	0.065	1	0.798
	No	13 (48.1%)	5 (18.5%)	18 (66.7%)			
	Total	19 (70.4%)	8 (29.6%)	27 (100.0%)			
Forced sex by inheritor	Yes	3 (8.3%)	1 (2.8%)	4 (11.1%)	0.065	1	0.789
	No	22 (61.1%)	10 (27.8%)	32 (88.9%)			
	Total	25 (69.4%)	11 (30.6%)	36 (100.0%)			

## Condom Use and Transactional/Casual Sexual Relationships

Using a cross-tabulation analysis (Table 4), we described the relationship between condom use and involvement in transactional/casual sexual relationships. The 36 WLHA were asked whether they were involved in transactional/casual sex in order to receive money, goods, or other favors in return, and if a condom was used. We found that 14 WLHA (38.8%) had been involved in transactional/casual sexual relationships for money, goods, or favors. Nine out of the 14 (64.3%) used condoms during those sexual transactions. However, more than a third of the widows who were involved in such transactional/casual sex relationships did not use a condom (35.7%, or 5 out of 14), demonstrating a potential possibility for HIV transmission. During the FGDs, participants mentioned poverty as one of the major factors driving women to engage in unprotected sex with their inheritors and/or those with whom they engaged in transactional or casual sex. Discussants explained that women in poverty lack power to negotiate safe sex, resulting in unprotected sex, which sometimes involves violence.



**Table 4. Condom use during transactional/casual sexual relationships**

		Involvement in transactional/casual sexual relationships to receive money, goods, or favors		Total
		Yes	No	
Condom use during such transactional/casual sexual relationships	Yes	9 (64.3%)	0 (0.0%)	9 (25.0%)
	No	5 (35.7%)	22 (100%)	27 (75.0%)

## Perceived Risks of HIV Infection Owing to Widow Inheritance

Risk perception is a core construct in many behavior change theories in public health (Corneli, et al., 2015). How one perceives or assesses his or her risk for a particular situation is grounded within a cultural framework based on one's experiences within that culture or society (Kubicek, et al., 2009). We measured the perceived risk of HIV infection owing to inheritance practices among participating widows. Results in Table 5 indicate that nearly three-quarters of the participants (72.3%) perceived a moderate or great risk of acquiring HIV because of widow inheritance practices. A small proportion of the participants (16.7%) perceived a small risk of acquiring HIV, and one woman perceived no risk at all. Three people (8.3%) didn't know of any risks. In addition, responses from the two FGDs revealed perceived risk relationships between WPIR and HIV in their community.

**Table 5. Perceived risk of acquiring HIV owing to women inheritance practices**

Perceived risk of acquiring HIV (n=36)	Frequency	Percentage
No risk	1	2.8%
Small	6	16.7%
Moderate	15	41.7%
Great	11	30.6%
Don't know	3	8.3%

## Knowledge of HIV/AIDS Risks and Transmission

Conceptualization of HIV risks and subsequent transmission modalities varies across societies. We investigated the knowledge of HIV risks and transmission methods among the widows. They were asked to rate each of six statements about HIV transmission as true or false.

Table 6 reveals that nearly all of the widows (94.4%) knew that a person can acquire HIV by receiving a blood transfusion that has not been screened for HIV. More than three quarters (77.8%) were aware that HIV can be transmitted by sharing needles. However, a significant percentage (83.3%) did not think HIV can be transmitted by unprotected oral sex. Likewise, 31 widows (86.6%) held the misconception that sharing eating utensils can transmit the virus.

**Table 6. Assessment of HIV risks and transmission**

A person can acquire HIV by:	True	False
Having unprotected oral sex with an HIV-positive person	6 (16.7%)	30 (83.3%)
Sharing bathing facilities with an HIV-positive person	3 (8.3%)	33 (91%)
Sharing needles with an HIV-positive person	28 (77.8%)	8 (22.2%)
Receiving a blood transfusion that hasn't been screened for HIV	34 (94.4%)	2 (5.6%)
Getting a mosquito bite	7 (19.4%)	29 (80.6%)
Sharing silverware with an HIV-positive person	31 (86.6%)	5 (13.9%)

Participants in the FGDs commented that most people in the community have not been tested for HIV owing to lack of a sense of urgency and fear of disclosure, increasing the risk of HIV transmission.

## Causes of Widow Inheritance

Women living with HIV were asked why widow inheritance is practiced in their communities. Participants revealed that the major reason was childbearing (47.2%), followed by sexual companionship (36.1%), and ritual sexual cleansing (13.9%). Other sexual rituals accounted for only 2.8 percent. We disaggregated the causes of widow inheritance by sociodemographic variables. Table 7 shows that most of the widows ages 18–35 (69.2%) were inherited for childbearing, and those older than 35 were inherited for sexual companionship. In addition, we found that most widows whose main occupation was not farming were inherited mostly for childbearing (60%).

**Table 7. Main causes for widow inheritance based on demographic profiles**

Sociodemographic variables	Ritual sexual cleansing	Bearing children	Sexual companionship	Other sexual rituals
<b>Age</b>				
18–35, n=13	2 (15.4%)	9 (69.2%)	2 (15.4%)	0 (0.0%)
More than 35, n=23	3 (13.0%)	8 (34.8%)	11 (47.8%)	1 (4.3%)
<b>Main occupation</b>				
Farming (n=31)	5 (16.1%)	14 (45.2%)	12 (38.7%)	0 (0.0%)
Nonfarming (n=5)	0 (0.0%)	3 (60.0%)	1 (20.0%)	1 (20.0%)
<b>Religion</b>				
Christian (n=34)	5 (14.7%)	16 (47.1%)	12 (35.3%)	1 (2.9%)
Muslim (n=2)	0 (0.0%)	1 (50.0%)	1 (50.0%)	0 (0.0%)
<b>Educational level</b>				
Not been to school, (n=6)	1 (16.7%)	2 (33.3%)	3 (50.0%)	0 (0.0%)
Primary education, (n=29)	4 (13.8%)	14 (48.3%)	10 (34.5%)	1 (3.4%)
Secondary education, (n=1)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)
<b>Average income per month (Tsh)</b>				
Less than 50,000	5 (16.1%)	15 (48.4%)	11 (35.5%)	0 (0.0%)
50,000–100,000	0 (0.0%)	0 (0.0%)	2 (66.7%)	1 (33.3%)

## Influence of Demographic and Socioeconomic Factors on Inheritance

Many individual and community-level factors affect the inheritance decision. The context of WPIR is determined by the social, economic, and cultural environment. We performed a bivariate analysis to compare the main causes of inheritance with the widow's demographic factors, such as location, education level, religious affiliation, occupation, and average monthly income.

Table 8 shows that location, educational level, and religion were not significant influences on the main causes for inheritance. However, we found that inheritance was influenced by a widow's average monthly income. Perhaps the initial intent of this custom (to make sure a widow was not left destitute by her husband's death) explains why poorer women were more likely to be inherited. The  $p$ -value ( $p=0.014$ ) indicates that average monthly income and cause of inheritance are dependent, and there is sufficient evidence to find an existing significant linear relationship between average income and causes of inheritance, because the correlation coefficient is significantly different from zero.

**Table 8. Bivariate analysis of the main causes of inheritance**

Main causes of inheritance	$\chi^2$ Value	df	p-value
Location	4.455	3	0.216
Education	1.958	6	0.923
Religion	0.470	3	0.926
Occupation	7.625	3	0.054
Average monthly income	15.913	6	0.014

## Loss of Major Household Assets

Access to land is an important source of livelihood and an indicator of welfare among rural farming households (Chapoto, Jayne, & Mason, 2007). When we examined the magnitude of property disinheritance among WLHA after the husband's death, we found that most widows lost their household assets immediately following the death. Table 9 shows that the main assets taken away from WLHA were land (58%), houses (39%), and livestock (17%). These household assets were examined primarily because the study was done among widows from smallholder farming communities. A Pearson chi-square test revealed a strong association between loss of household assets and husband's death, particularly land ( $p$ -value=0.000) and houses ( $p$ -value=0.001). The chi-square test results correlate with the FGDs, in which most widows were not aware of their rights to property inheritance. Widows expressed that male dominance in the family continued to force widow inheritance following the husband's death. Furthermore, relatives were reported to be greedy and eager to inherit assets, even if it meant leaving widows and children without property.

**Table 9. Loss of major household assets**

Household assets	Yes	No	Chi-square	df	p-value
Land	21 (58%)	15 (42%)	36.000	1	0.000
House	14 (39%)	22 (61%)	11.234	1	0.001
Livestock	6 (17%)	30 (83%)	1.851	1	0.174

## **Institutional Challenges**

Institutionally, the Government of Tanzania recognizes the formation of the National Council of People Living with HIV and AIDS (NACOPHA), an umbrella organization established by people living with HIV to serve as the leading voice to advocate their issues and concerns. Members of NACOPHA are from different sectors and social organizations, working with more than 13 PLHIV networks and 137 PLHIV district clusters nationwide. Each district council consists of one PLHIV cluster, commonly known as a KONGA, to support individual PLHIV and their groups at the district council and ward levels. Two official representatives of KONGAs, one based in Magu District and one based in Bugogwa Ward in Ilemela District, were asked about institutional challenges that hinder the provision of effective support for WPIR in their constituencies. They face the following challenges:

- Lack of transport to reach remote communities in the rural areas (a response by the district KONGA representative)
- Insufficient funds to support programmatic social and economic justice interventions for WLHA (a response by the ward KONGA representative)
- Lack of furnished offices with adequate care and support
- Lack of educational materials for members and the community at large (a response by both district and ward KONGA representatives)

## DISCUSSION

We began with a hypothesis that there is a causal relationship between WPIR and HIV transmission. Most widows were found to be inherited immediately after the husband's death. We found that while most inheritors did use force to have sex, more than half of them did not use condoms, and their HIV status was not known to the widows. The assumption was that if the inheritor's HIV status were known, condom use would be more likely, thereby reducing the risk of HIV transmission for both the inheritor and the widow. The infected inheritor would not transfer HIV to the widow, or vice versa.

We also hypothesized that transactional/casual sexual relationships are part of a gendered strategy for controlling widows, used by inheritors or casual sexual partners in exchange for money, goods, or favors. Widows who are deprived of their household assets may be motivated by basic survival and subsistence needs to engage in transactional/casual sex, which often occurs without condoms. This increases the possibilities for HIV transmission.

Our findings confirm that a small but significant proportion of widows either perceived no risk at all or didn't know of any risks for HIV transmission from the tradition of widow inheritance. This information should be useful for constructing behaviour change programs among widows in particular and the community in general.

Most individuals are reported as not having been tested for HIV, potentially putting them at risk for HIV transmission. The data reveal a significant proportion of widows who are not fully knowledgeable of HIV risks and related modes of transmission. Poverty among widows, translated into lack of power to negotiate safer sex, can result in unprotected sex, thus exposing widows to the risk of acquiring HIV.

Despite several reasons for widows' inheritance, childbearing is the primary motivator, partly due to cultural intentions to keep the deceased family intact and to increase the number of children borne by the inherited widow. Family planning in the context of HIV is not given any priority. This exacerbates poverty among young widows of childbearing age, because they must provide for more children, thereby reducing time for economic production while they take care of their children.

Moreover, poverty is exacerbated by policies and traditions based on unequal gender roles that prevent widows from owning property or directly inheriting assets such as land, livestock, and houses. Until these norms promoted by widow inheritance are addressed, more widows will be subjected to continuous risk of HIV transmission.

These findings reveal challenges that hinder effective support for widows living with HIV due to lack of financial and infrastructural spaces required to advocate their needs. Insufficient funds to support social and economic justice interventions are challenging the provision of care and support to all PLHIV in Tanzania.

## Limitations

Our data did not allow us to discern whether widows indirectly or directly promoted transactional/casual sexual relationships that led either to widow inheritance or property inheritance decisions that put them at risk for HIV transmission. This remains an important issue to address in future research.

## RECOMMENDATIONS

Based on our findings, we present the following recommendations, which consider the position of women living with HIV as individuals, family members, and community members within the broader policy environment.

- **Engage the community through district and ward clusters:** Strengthen the use of district and ward HIV clusters (KONGAs) as important contributors to interventions for reducing the vulnerability of widows. Widows' sense of desperation and loss of dignity leads to self-exclusion from community support. Nonstate actors, especially NGOs and CBOs focusing on HIV, should consider expanding support of programs that address widows' psychological, social, and legal needs.
- **Expand local policy engagement and implementation:** Local government structures responding to the needs of PLHIV should expand beyond treatment, nutrition, and income generation to provide long-term social and legal support and asset protection for WLHA.
- **Develop multistakeholder partnerships for HIV:** Introduce or strengthen the use of public-private partnerships for HIV interventions. Institutional collaborations for local programs should invest in context-specific longitudinal studies to track the rights and entitlements of women and households affected by HIV, in order to generate strong evidence to inform policy implementation and monitoring.
- **Establish socioeconomic justice programs:** Social protection programs designed to strengthen the resilience of vulnerable groups should expand to empower widows, whose asset bases are being eroded through property expropriation based on discriminatory customs.
- **Ensure inclusiveness and active participation of PLHIV:** Programs addressing partner violence and gender inequality should be intensified at subnational and local government levels to address the strategic needs of WLHA. Laws and policies should be enacted to empower and include PLHIV in determining resource allocations and interventions. These activities should occur with guidance from the PLHA to ensure that they improve the position of women's rights to own and inherit property.
- **Engage local policymakers to abandon the widow inheritance custom:** Communities should be educated on the harms of widow inheritance and ritual cleansing. Human rights advocates and community-based activists should collaborate to encourage their communities to renounce these practices as examples of gender-based violence and human rights violations.

## CONCLUSION

Our findings reveal a deep and complex set of social and economic challenges that increases the vulnerability of widows and the risk of HIV transmission in Tanzania. The structure of women's property and inheritance rights contributes significantly to the transmission of HIV among WLHA through the discriminatory disinheritance of their land and houses. These challenges should be addressed both through existing response structures and new, innovative strategies.

We demonstrated that transactional sexual relationships are strongly correlated with increased transmission of HIV among widows, and fit within a broader context of WPIR and its link to poverty among widows. In particular, the association between WPIR and HIV transmission in smallholder farming communities around Lake Victoria in Tanzania suggests that simple interventions will not suffice.

Addressing risky behaviors alone will not resolve the gender inequities that contribute to them. Strengthening a widow's right to her husband's property will involve layers of policy and legal interventions.

Our findings suggest that interventions to transform beliefs that privilege men controlling women will need to be mainstreamed into programs that address risk behaviors to reduce transactional sex, HIV risk, and gender-based violence. In turn, these layered interventions will contribute significantly to reduce the expropriation of WLHA's assets and, at the same time, build these women's social and economic capital.

## REFERENCES

- Agot, K. E., Vander Stoep, A., Tracy, M., Obare, B. A., Bukusi, E.A., Ndinya-Achola, J.O., . . . Weiss, N. S. (2010). Widow inheritance and HIV prevalence in Bondo district, Kenya: Baseline results from a prospective cohort study. *PLoS One*, 5(11), e14028. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2984493/pdf/pone.0014028.pdf>
- Corneli, A. L., McKenna, K., Headley, J., Ahmed, K., Odhiambo, J., Skhosana, J., . . . Agot, K. (2015). A descriptive analysis of perceptions of HIV risk and worry about acquiring HIV among FEM-PrEP participants who seroconverted in Bondo, Kenya, and Pretoria, South Africa. *Journal of the International AIDS Society*, 17(3), online. Retrieved from <http://www.jiasociety.org/index.php/jias/article/view/19152/3955>
- Chapoto, A., Jayne, T. S., & Mason, N. (2007). Security of widows' access to land in the era of HIV/AIDS: Panel survey evidence from Zambia. (Revised version). Retrieved from <http://fsg.afre.msu.edu/zambia/ps22.pdf>
- Deere, C. D., & Doss, C. R. (2006). The gender asset gap: What do we know and why does it matter? *Feminist Economics* 12(1–2), 1–50. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.465.4520&rep=rep1&type=pdf>
- Deere, C. D., & Doss, C. R. (2009). Gender and the distribution of wealth in developing countries. In *Personal Wealth from a Global Perspective*. Retrieved from <https://doi.org/10.1093/acprof:oso/9780199548880.003.0017>
- Drimie, S. (2002). The impact of HIV/AIDS on land: Case studies from Kenya, Lesotho and South Africa. A synthesis report prepared for the Southern African Regional Office of the Food and Agricultural Organization of the United Nations (FAO). Retrieved from [http://www.sarpn.org/documents/d0000147/P143\\_Impact\\_of\\_HIVAIDS.pdf](http://www.sarpn.org/documents/d0000147/P143_Impact_of_HIVAIDS.pdf)
- International Center for Research on Women (ICRW). (2004). To have and to hold: Women's property and inheritance rights in the context of HIV/AIDS in Sub-Saharan Africa. Working paper, June 2004. Retrieved from <https://www.icrw.org/wp-content/uploads/2016/10/To-Have-and-To-Hold-Womens-Property-and-Inheritance-Rights-in-the-Context-of-HIV-AIDS-in-Sub-Saharan-Africa.pdf>
- International Labour Organization (ILO). (2016). Educated, empowered, inspired: Transforming lives through the response to HIV and AIDS in East and Southern Africa. Lessons from the economic empowerment approach. Geneva, Switzerland: ILO. Retrieved from [http://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---ilo\\_aids/documents/publication/wcms\\_456923.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/publication/wcms_456923.pdf)
- Izumi, K. (2007). Gender-based violence and property grabbing in Africa: A denial of women's liberty and security. *Gender & Development*, 15(1), 11–23. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/13552070601178823>



Jewkes, R., Morrell, R., Sikweyiya, Y., Dunkle, K., & Penn-Kekana, L. (2012). Transactional relationships and sex with a woman in prostitution: Prevalence and patterns in a representative sample of South African men. *BMC Public Health*, 12, 325. Online. Retrieved from <http://www.biomedcentral.com/1471-2458/12/325>

Joint United Nations Programme on HIV/AIDS (UNAIDS). (2016). Global AIDS update 2016. Geneva, Switzerland: UNAIDS. Retrieved from <http://www.unaids.org/en/resources/documents/2016/Global-AIDS-update-2016>

Kubicek, K., Carpineto, J., McDavitt, B., Weiss, G., Iverson, E. F., Au, C. W., . . . Kipke, M. D. (2008). Integrating professional and folk models of HIV risk: YMSM's perceptions of high-risk sex. *AIDS Education and Prevention*, 20(3), 220–238. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2753294/pdf/nihms132755.pdf>

Legal and Human Rights Centre (LHRC) & Zanzibar Legal Services Centre. (2013). Tanzania human rights report 2012. Dar es Salaam and Zanzibar, Tanzania: LHRC. Retrieved from [http://www.humanrights.or.tz/downloads/tanzania\\_human\\_rights\\_report\\_2012.pdf](http://www.humanrights.or.tz/downloads/tanzania_human_rights_report_2012.pdf)

McCloskey, L. A., Williams, C., & Larsen, U. (2005). Gender inequality and intimate partner violence among women in Moshi, Tanzania. *International Family Planning Perspectives*, 31(3), 124–130. Retrieved from <https://www.guttmacher.org/journals/ipsrh/2005/09/gender-inequality-and-intimate-partner-violence-among-women-moshi-tanzania>

Mugambi, J., (2006): The impact of HIV/AIDS on Kenyan rural women and the role of counseling. *International Social Work*, 49(1), 87–95. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/0020872806057084>

Oluga, M., Kiragu, S., Mohamed, M. K., & Walli, S. (2010). “Deceptive” cultural practices that sabotage HIV/AIDS education in Tanzania and Kenya. *Journal of Moral Education*, 39(3): 365–380. Retrieved from <http://www.tandfonline.com/doi/full/10.1080/03057240.2010.497617>

Parliament of Tanzania. (1971). Law of Marriage Act. Retrieved from <http://landwise.resourceequity.org/record/363>

Perry, B., Olouch, L., Agot, K., Taylor, J., Onyango, J., Ouma, L., . . . Corneli, A. (2014). Widow cleansing and inheritance among the Luo in Kenya: The need for additional women-centred HIV prevention options. *Journal of the International AIDS Society*, 17, 19010. Online. Retrieved from <http://www.jiasociety.org/index.php/jias/article/view/19010/3800>

Peterman, A. (2009). Essays in maternal health and human rights: Evidence from sub-Saharan Africa. Unpublished dissertation at the University of North Carolina at Chapel Hill. Retrieved from <https://cdr.lib.unc.edu/indexablecontent/uuid:eaad0863-51b3-459a-bbdc-3e6761b02dcf>

Peterman, A. (2011). Women's property rights and gendered policies: Implications for women's long-term welfare in rural Tanzania. *Journal of Development Issues*, 47(1) 1–30. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/00220381003600366?journalCode=fjds20#.VLOzx3u4E8Q>

Sadurski, W. (2002). Judicial review and the protection of constitutional rights. *Oxford Journal of Legal Studies*, 22(2), 199–225. Retrieved from <https://academic.oup.com/ojls/article/22/2/275/1428890/Judicial-Review-and-the-Protection-of>

Tanzania Commission for AIDS (TACAIDS), Zanzibar AIDS Commission (ZAC), National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), & ICF International. (2013). *Tanzania HIV/AIDS and malaria indicator survey 2011–12*. Dar es Salaam, Tanzania: TACAIDS, ZAC, NBS, OCGS, and ICF International. Retrieved from <https://dhsprogram.com/pubs/pdf/AIS11/AIS11.pdf>

Tenkorang, E. Y. (2013). Marriage, widowhood, divorce, and HIV risks among women in sub-Saharan Africa. *International Health*, 6(1)46–53. Retrieved from <http://inthealth.oxfordjournals.org/content/6/1/46.short>

Tumlinson, K., Thomas, J. C., & Reynolds, H. W. (2014). The effect of women's property rights on HIV: A search for quantitative evidence. *AIDS Care*, 27(1) 112–122. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/09540121.2014.947236#.VGDF0slsOZ4>

Tanzania Participatory Poverty Assessment (TzPPA). (2003). Vulnerability and resilience to poverty in Tanzania: Causes, consequences and policy implications. Retrieved from [http://www.repoa.or.tz/documents\\_storage/Research%20and%20Analysis/TzPPA%20main%20Report%2020023.pdf](http://www.repoa.or.tz/documents_storage/Research%20and%20Analysis/TzPPA%20main%20Report%2020023.pdf)

United Nations Economic Commission for Africa (UNECA). (2003). Cited in Chapoto, A., et al. (2007). Security of widows' access to land in the era of HIV/AIDS: Panel survey evidence from Zambia (revised version), p. 2. Retrieved from [http://fsg.afre.msu.edu/zambia/wp\\_25.pdf](http://fsg.afre.msu.edu/zambia/wp_25.pdf)

Walker, C. (2002). Land reform in southern and eastern Africa: Key issues for strengthening women's access to and rights in land. Report on a desktop study commissioned by the Food and Agriculture Organization (FAO), Sub-regional Office for Southern and Eastern Africa, Harare, Zimbabwe. Unpublished manuscript prepared for the Food and Agriculture Organization (FAO). Retrieved from <http://www.jurisafrica.org/docs/statutes/Walker+on+Women's+access+to+Land.pdf>

## **MEASURE** Evaluation–Tanzania

TCRS Building,

1st Floor, Plot No. 436, Mwai Kibaki Road, Mikocheni B.

Dar es Salaam, Tanzania

+255 22 277 3023

[www.measureevaluation.org/measure/measure-evaluation-tz](http://www.measureevaluation.org/measure/measure-evaluation-tz)

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