

# Gender Analysis of the Effects of Agricultural Assets and Income on Rural Household's Food Security in South Africa: A Systematic Review

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**Abstract:** Numerous development intervention programs have been initiated in order to break the cycle of rural food insecurity. Among these development interventions, dominant view strongly emphasized access to agricultural assets as a veritable tool for promoting increased productivity and improved food security. Despite these interventions, rural household livelihoods and productivity are reported to have stagnated while poverty rates remained unbelievably high. Comprehensive review on agricultural asset ownership and its effects on rural household food security in South Africa is scanty and limited.

Many studies have reported the results from development studies literature that focused on the growing body of evidence emphasizing the importance of assets for poverty reduction as well as for households' current and long-term well-being in less developed countries. From these reports there has, however, been no formal systematic review as far as this study knows that provide evidence of whether gender influences or affects access and ownership of assets in rural households of South Africa.

The objective of this review is to assess the extent to which gender influences access to agricultural assets in rural households of South Africa. This review developed a comprehensive search strategy designed to identify articles that present information on gender and asset ownership. The study screened the titles and, where necessary, the abstracts of 500 publications. 21 studies were judged to contain relevant evidence and were reviewed in detail. This study builds on and expand previous asset ownership studies by covering the period 1998-2018 and it finds results similar to those of previous studies, but we attribute the lack of impact of gender access of agricultural assets among rural households on household food security to methodological weaknesses of the studies reviewed.

**Keywords:** Gender, assets, ownership, agriculture, impact evaluation

## 1. BACKGROUND

Better understanding of ownership and control of assets is a critical component for enhancing the welfare of rural households in developing countries. A crucial first step toward this understanding has to be centered on acquiring detailed information about the gender dimensions of ownership and control of these assets by rural households. Being able to own and have control over assets such as land, capital and farm equipment enable households to create for themselves and their families stable and productive lives. However, men and women are reported to have different access to and control over assets. The gap of gender differences has long attracted the attention of development practitioners especially in developing

countries and the call for proper developmental measures to be taken in order to bring about equal opportunities for both men and women has been louder over the years (Kristjanson et al. 2004). (Quisumbing, 1996) reported that the essence of gender differences is also associated with the unequal power relations enforced by the cultural norms in rural areas which favor men and exclude women. The negative impacts of rural cultural norms for perpetuating such unequal power relations is restricting women's social access and control over assets.

These gender differences negatively affect the welfare and productivity of women and the overall wellbeing of not only households but of communities and nations. It is widely believed that not only does access, ownership and control over assets play a significant role in enhancing the wellbeing of rural households, insufficient access to these assets is linked to major causes of rural poverty and food insecurity (Kristjanson et al. 2010). Literature show that an increase in access to agricultural assets can boost incomes of rural households and their abilities to acquire secured livelihoods.

Literature also shows that secure access to these assets enable households improve their welfare, in particular, by enhancing the asset base of those, such as women, whose rights to access, ownership and control over assets are often neglected. At the same time, it creates the incentive needed for investment, a key element underlying sustainable growth (World Bank, 2003).

A shift in thinking about factors that are key to improving the conditions of the poor in developing countries in terms of economic growth and agricultural production occurred after research on budget studies in developing countries documented that providing secure access to increase agricultural productivity of many developing countries seems to be one of the most sensible ways to ensure greater food security and alleviate poverty (Ali and Pernia, 2003; Hanjra and Gichuki, 2008). Knowledge of the poverty reduction effects of access to different agricultural assets is therefore crucial for policy makers to ensure effective prioritization of policy interventions that reduce rural poverty.

There are unfortunately few studies that examine the relationship between gender and asset ownership. One reason why gender is not a prominent part of many of these studies is lack of empirical information on their distribution by sex. Few surveys actually collect information on individual ownership of land and other productive assets. Most data on assets is collected at the household level, which gives a partial picture of individual-level ownership patterns. As a result, researchers and policy makers have only an incomplete understanding of the assets that women own, how they acquire them, and how they use them to influence decisions that affect their own and others' welfare (Deere and Doss 2006).

This study is unaware of any systematic review or meta-analyses on gender influence or effect on access to agricultural assets amongst rural households of the developing countries. In addition, the review highlights study design limitations in many of the studies searched that have not found significant impacts or gender influence on asset ownership. The concerns about design limitations provide a strong motivation for this systematic review, which serves as an independent review of the quality and reliability of findings offered in the available literature.

### **1.1 Identification of the Problem (The Review Question)**

One of the most important aspect when conducting a systematic review is formulating a review question. The formulated question is needed to guide the review and synthesis process. Thus the primary research question for this systematic review is:

**Does gender influence the access of assets in rural households of South Africa?**

To follow the Systematic Review convention, the research question needs to be broken down into components;

**Table 1: Description of Outcome Indicators Employed in the Review**

Target Population	Rural households, Agriculture and rural communities, ways in which gender, age, community standing, and other characteristics influence the gender' ability to own assets
Intervention	Asset ownership
Outcomes	Food security, economic growth, agricultural production, improved rural poverty, natural resource management, gender-related inequalities, conflict management reduced poverty among female headed households, agricultural productivity, Welfare of rural asset holders, measured in terms of income and consumption, gender equity

## 2. OBJECTIVE OF THE REVIEW

To establish if household gender influence or determine assets ownership in rural areas of south Africa.

## 3. SEARCH METHODS FOR IDENTIFICATION OF STUDIES

Inclusion and exclusion criteria of relevant studies for the review

The inclusion criteria of studies used in the study are given below, together with the rationale for their use:

The review searched published, unpublished and 'grey' (for example, journal articles, theses etc.) literature from FAO, IIED, IFAD, and the World Bank during the period 1998 to 2018 for relevant studies. Searches were carried out on the six databases the CABDIRECT, Academic search complete, CRCnetbase eBooks, GREENFILE (EBSCohost), Wiley online library and Springerlink. In addition, to minimize the risk of missing relevant papers, we searched the reference lists of key studies, applied the "forwards citation" utility in Google scholar to find papers that cited these studies and reviewed the full reference lists of the studies similar to the study's subject of investigation.

**Table 2: Provides A Summary of the 21 Studies of Gender Asset Ownership Reviewed in this Paper (Studies included in Quantitative Synthesis)**

Author/ Year	Title	Method	Weakness
Bezabih, M., Holden, S. and Mannberg, A., 2016.	The role of land certification in reducing gaps in productivity between male-and female-owned farms in rural Ethiopia.	Used the propensity score matching method that enabled controlling for observed biases, such as the difference in the characteristics of certified and noncertified households that we noted in their data and the results suggested that the effect of certification is positive and significantly stronger for female-headed households.	Their analysis did not go into the possible impacts of the program on household productivity
Blackden, M., Canagarajah, S., Klasen, S. and Lawson, D., 2007	Gender and growth in Sub-Saharan Africa: Issues and evidence.	This study focused on the theoretical insights and relied only on empirical evidence and it found that there is considerable evidence that inequalities in access to land and productive inputs reduce agricultural productivity and contributes to reducing women's ability to participate effectively in, and benefit equally from, growth and poverty reduction in Africa	To investigate thoroughly the impact of gender gaps in modern inputs, needs to use advanced quantitative and econometric techniques to better understand these processes and design appropriate solutions
Catherine Ragasa, GuushBerhane, FannayeTadesse&AlemayehuSeyoum-Taffesse (2013)	Gender Differences in Access to Extension Services and Agricultural Productivity	The study used a cross-sectional instrumental-variable regression method using a regionally representative data set of more than 7500 households and it found that female heads of households were less likely to access quality services than their male counterparts	Evidence of impact of asset ownership is scant

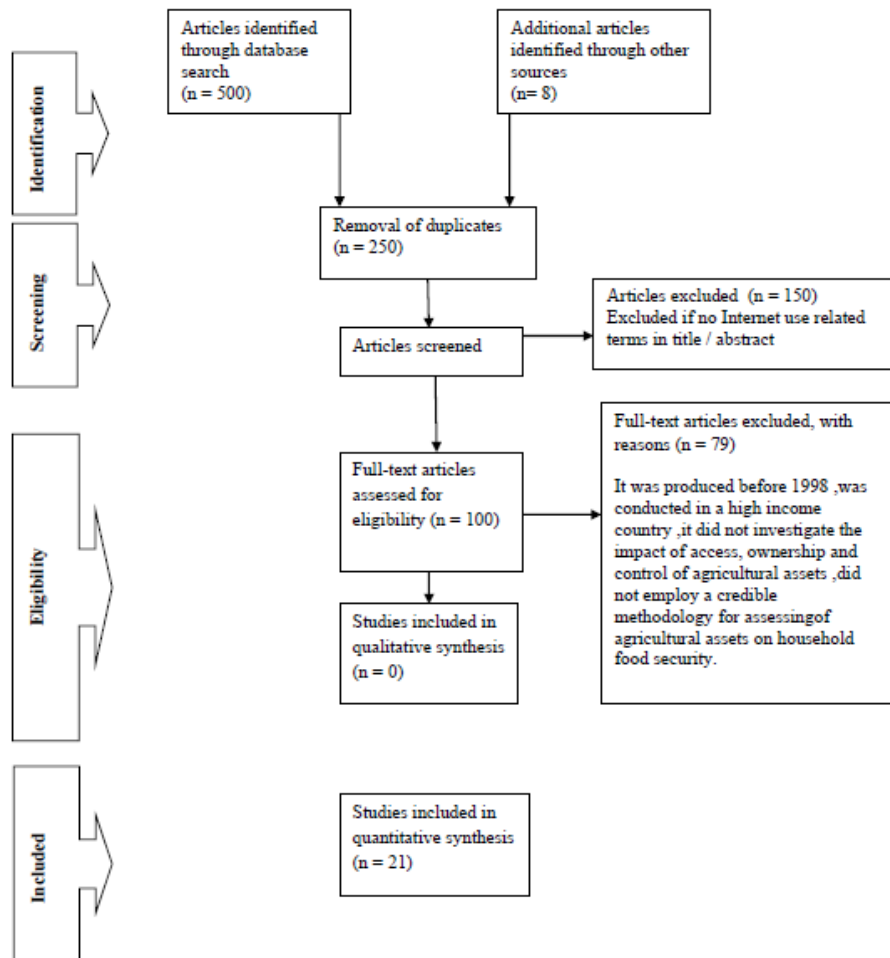
Croppenstedt, A., Goldstein, M. and Rosas, N., 2013., 28(1), pp.79-109.	Gender and agriculture: inefficiencies, segregation, and low productivity traps.	Descriptive analysis and indicated that female farmers in many countries have lower yields than do male farmers	The evidence is not conclusive or comprehensive
Deere, C.D., Oduro, A.D., Swaminathan, H. and Doss, C., 2013.	Property rights and the gender distribution of wealth in Ecuador, Ghana and India	Descriptive in nature	The study estimated married women's share of couple wealth and relate it to how assets are owned within marriage not looking at individuality of asset ownership
Dick Meinzen, R., Johnson, N. R., Quisumbing, A., Njuki, J., Behrman, J., Rubin, D., Peterman, A and Waitanji, E. 2011.	Gender, assets, and agricultural development programs: a conceptual framework.	A conceptual framework	Examined how gender and assets influence the well-being of households and individuals not how gender influence asset ownership
Enete, A.A. and Amusa, T.A., 2010.	Determinants of women's contribution to farming decisions in cocoa based agroforestry households of Ekiti State, Nigeria.	An ordered logit model was employed to estimate the influence of household socio-economic factors on the contribution of women to household farming decisions	very little evidence of impact (area of development)
FAO, 2012. Food and Agricultural Organization of the United Nations.	The State of Food and Agriculture: Women in Agriculture- Closing the Gender Gap for Development.	Descriptive in nature	Describes the relationship between women and agriculture in general
Fletschner, D., 2008.	Women's access to credit: does it matter for household efficiency?.	Used qualitative measures that captured individual access to credit instead of relying on households' access to credit.	
Grace Jo. 2005.	Rural women's access to land and livestock in Badakhshan, Bamyan and Kabul Provinces. Afghanistan Research and Evaluation Unit Report	Findings from this study showed that women had a great deal of involvement in agriculture, yet few own land or livestock themselves, and where women did, they still lacked control over it	
Horrell, S. and Krishnan, P., 2007.	Poverty and productivity in female-headed households in Zimbabwe.	Used Cobb-Douglas production function and the findings showed that female-headed households were not unusually income poor but they lacked assets, particularly those assets needed for agricultural production	Study interest lies in testing whether headship of the household affects agricultural productivity
Jacobs Krista, Namy Sophie, AslihanKes, Bob Urmila and Vadivelu-Moodley. 2011.	Gendered assessment of men's and women's rights over assets including ownership, documentation and control over use, transfer and transactions in Uganda and South Africa.	Used empirical analysis and provides technical guidance on the collection of harmonized, quality sex-disaggregated data for generating land statistics on the various land rights that women and men have, beyond ownership.	Reporting gender gaps in land rights, extending beyond reported ownership

Meinzen-Dick, R.S., Brown, L.R., Feldstein, H.S. and Quisumbing, A.R., 1997.	Gender, property rights, and natural resources	Descriptive in nature	There are few studies like this one that identify critical gender asymmetries in asset ownership rights and how these asymmetries affect the efficiency of resource use and equity of resource distribution
Nyukuri, E., 2006.	Women, Land and Resource Conflicts: Policy Implications and Interventions in Kenya.	Descriptive in nature	Identifies the extent to which gender aspects can be of help in identifying the specific pathways involved and hence the entry points for intervention
Paris Thelma, PedeValerien, Luis Joyce, Sharma Raman, Singh Abha and Estipular Jeffrey. 2009.	Gender, caste, and asset control: implications for agricultural projects in rice-wheat systems of eastern India	Qualitative data	Few studies that focus on men's and women's different degrees of ownership, access in connection with key livelihood-sustaining assets
Puri S, Kaushik S, Goel R. 2006.	Inter-gender distribution of resources within families of rural Haryana. Journal of Dairying, Foods and Home Sciences	Descriptive in nature	To analyze the gender differences existing in the rural families globally with regard to asset access and control
Quisumbing, A.R., Brown, L.R., Feldstein, H.S., Haddad, L. and Peña, C., 1995.	Women: The key to food security	Descriptive in nature	
Raney Terri and State of Food and Agriculture (SOFA) Team. 2011.	Gender differences in assets. Food and agriculture organization of the United Nations. Agriculture and Economic Development Analysis Division (ESA)	Descriptive in nature	Few studies like this one that document the biased distribution of assets among male and female-headed households in rural areas.
SohoulaneDjebou, D.C., Price, E., Kibriya, S. and Ahn, J., 2017.	Comparative Analysis of Agricultural Assets, Incomes and Food Security of Rural Households in Ghana, Senegal and Liberia.	The study used a multivariate logistic model	The study evaluated how agricultural assets affect the food security status of rural households with no specification on the gender influence
Sumon Kumar Bhaumik, Ralitzadimova & Ira N. Gang (2016)	Is Women's Ownership of Land a Panacea in Developing Countries? Evidence from Land-Owning Farm Households in Malawi		

TeferaTewodros. 2008.	Impact of the land tenure reforms on women empowerment in land management decisions at household level in rural Ethiopia		
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**The exclusion criteria in order to screen the studies relevant to this review was set and a study was excluded if: (these represent the screen criteria)**

- Date: it was produced before 1998 (20-year period).
- Language: an article was not written in English
- Geographic location: it was conducted in a high income country
- Intervention: it did not investigate the impact of access, ownership and control of agricultural assets and the gender distribution of these assets amongst rural households in developing countries.
- Study design: it did not employ a credible methodology for assessing of agricultural assets on household food security.



**Figure 1: Flowchart of Primary Study Selection**

## CONCLUSION

This review assessed the extent to which gender influences access to agricultural assets in rural households of South Africa. Of all the studies reviewed, 21 studies met our inclusion criteria and these studies reported little evidence of gender influence or effect on access to agricultural assets amongst rural households of the developing countries. Also from the review of these studies, it can be concluded that women have lesser access and control over assets when compared to men. Some of the potential reasons identified which contribute to the gender differences are cultural and traditional beliefs, lack of women's education and empowerment, male domination, inadequate access to modern inputs as well as services that are relevant for productive activities in rural areas. Moreover, some of the recent studies (dating 4 years ago) documented that the access and control of assets, empowerment status of women have become better to some extent when compared to the earlier times.

This review also concludes with a recommendation for studies investigating the impact of agricultural interventions and asset ownership to narrow the gender differences as it is one of the solutions to increase women access to assets. We found a lot of studies that reported that the biased distribution of assets damages not only women, but also is a hindrance to the ability of a county to achieve food security.

There is also evidence that assets are not shared or distributed equally, even within households, with women usually controlling fewer assets than men. However, the implications of the gender gap in assets have not been fully examined, nor has the knowledge that does exist been consistently applied to development programs.

This review adds to the above mentioned evidence and thereby makes a significant contribution to the related yet somewhat parallel literatures about female ownership of assets and economic development (through household welfare).

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