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Poverty Reduction by Getting Female Farmers Access to Cash and Credit

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Abstract

Women represent the majority of agricultural labor in low-income countries, even though they have lower access to productive resources in agriculture. A major problem is the shortfall of independent income, control over finances, and lack of credit. Hence this paper examines whether women's access to cash and credit can reduce poverty headcount. Moreover, advantageous outcomes such as an increase in yield, improvement in child health, and increase in sustainability may be achieved by allowing women farmers more access to finances. This research entails a comparative analysis between Kenya and Uganda, where I examine poverty headcount in comparison to financial policies, food security, and gender equality. Furthermore, implementing policies that assist with the prosperity of female farmers is predicated on fundamentally understanding current trends and policies that deny women equal access to agricultural resources. Therefore, this paper prioritizes interpreting those caveats from a feminist-focused standpoint; while simultaneously considering the smaller factors that may impact such prosperity outside of gender-based policy. The paper concludes that there is a casual relationship between poverty and female farmer's access to cash and credit based on strong support from Kenya's change in wage and salaried female workers.

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Poverty Reduction by Getting Female Farmers Access to Cash and Credit

Introduction

Women represent the majority of agricultural labor in low-income countries; however, they have low access to productive resources. A major problem is the shortfall of independent income, control over finances, and lack of credit. Without access to credit and finance, it is hard for women to increase their yield. This affects their ability to feed more people and provide food security for their own families and communities. Providing women with access to finance and credit may have a positive effect on reducing poverty headcount due to food security, improved child health, and better sustainability. This study is a comparative analysis examining if women's access to credit and finance affect Kenya's and Uganda's poverty headcount. If the study shows a positive result, it will strengthen the idea of focusing on women in agriculture to reduce poverty headcount which will benefit everyone. It also provides a more specific route to reduce poverty headcount which other countries will be able to implement. Measuring poverty is hard and there are many factors to account for, however, every factor needs to be thoroughly studied for a better understanding of what can be implemented to reduce poverty in general.

Poverty headcount is directly related to food insecurity because low income makes food less available. Most women who are working with agriculture in low-income countries (LIC) are small farm holders, and they represent the majority of the food production. This being said, low income or no income at all, they fall under the line of poverty headcount (ratio at 1.90\$ per day). By focusing on financial rights for these women, poverty headcount might be reduced in their countries. Not only because they are taken out of poverty, but because they provide more food for their communities. With higher yields, more people will be able to specialize in other fields than agriculture which allows the beginning of the industrialization process. Food prices are also more likely to fall once more becomes available and produced at

a lower cost. This increases food accessibility. Focusing on women in agriculture is a way of lifting the lowest class to reduce poverty.

This study focuses on policies that increase women's participation in the labor market such as the percentage of state-owned banks, bankruptcy and collateral laws protecting the lenders and borrowers; it compares the financial opportunities with poverty headcount and gender inequality. The financial focus for this study is related to factors excluding women from the financial sector, then they are further compared with gender equality and poverty headcount to understand how better financial inclusion of women in agriculture affects equality and poverty headcount.

Literature review

Women represent 43% of the agricultural labor force in the world today, and in developing countries, they produce between 60-80% of food crops (Hawken 2017). Yet, they still lack access to necessary resources such as credit and finances, land ownership, technology, agricultural education and training, equal treatment, suitable working conditions, water. Women are also underrepresented in agricultural organizations and groups, which prevents them from being a part of important decision-making. In some regions, women cannot have contact with men outside their families and are therefore socially and economically dependent on their male relatives. Despite being such an important part of the agricultural labor, only 10-20% of women are landholders (Hawken 2017). When women do not own anything, they become vulnerable to domestic violence, unequal treatment, and their men's decisions. A decrease in women's vulnerability will protect them from bad marriages, bad treatment by relatives, and devastating effects of divorces or their husbands' passing.

A woman's social class in these conditions should not be measured next to her husband and his resources. It should be measured after her own resources and her own vulnerability in case something was to go wrong (Agarwal 1994). The measurement that is

used to describe these power relations is women's empowerment. Andrea Cornwall describes empowerment as "shifts in power relations" (344), which despite its broad explanation is very accurate. Empowerment for women in agriculture is most commonly measured with the Women's Empowerment in Agriculture Index (WEAI). WEAI observes women's power over decision-making about their agricultural production, decision-making power and access to productive resources, time allocation, leadership in their community, and control over income (Akter 2013). Agricultural-specific measurement is important to have because it highlights the effects of having empowered women in agriculture. Furthermore, it can motivate actions from low-scoring countries on the index because negative data inspires positive progress (Akter 2013). WEAI provides a lot of information but it does not provide the full picture of countries' social culture, political situation, conflicts, etc. Therefore, it is important to conduct case studies when studying women's empowerment in agriculture. Akter (2013) argues gender research has geographic biases which cause incomplete knowledge in region-specific agriculture gender gaps. Empowerment is a multidimensional problem where some countries are good at empowering women with control over income but not at providing good time allocation. In the Philippines for example, men tend to own the majority of the land, but women are active members in agricultural organizations (Akter 2013). Empowerment measurements are important but are difficult to conduct, which has led to incomplete or unavailable data in many places. Because of the lack of data, I am unable to use WEAI for this paper. Rather the paper will focus on specific financial factors that include women in the labor force.

Women's empowerment in agriculture has shown significant results for increased efficiency, improved productivity, and food security. If women were able to access productive resources their farm yield is estimated to rise 20-30%, due to increased yield; agricultural GDP in low-income countries is predicted to rise 2.5-4%; undernourished people are

anticipated to drop by 12-17%; and about 100-150 million people will not go hungry (Hawken 2017). Hawken argues when women do not have access to cash or credit, they also will not be able to purchase farm tools, water, seeds, or fertilizers, etc. With limited resources and techniques, the women are working in pre-industrial conditions, and they have no way out. To increase yield, labor and capital are needed. Women are the labor but they do not have the capital. Cash and capital make it possible for women to try new crops and farming techniques which is crucial today when global warming is changing farming conditions. This will also promote more sustainable techniques without extreme use of pesticides and fertilizers, which many times deteriorate the soil, and is expensive (Hawken 2017). Agarwal presents a welfare argument where women's independent access to economic resources is said to reduce households' risk of poverty (1994). The welfare argument stems from the differences in women's and men's spending, especially in poor households. Women tend to spend almost all their income on their family while men spend significant parts of their income on personal needs (Agarwal 1994). From their earnings, women invest about 10 times more than men on their family's well-being. This has a great impact on their food security (Akter 2014). Himmelweit (2001) argues that this is due to their great involvement in childcare which is their second job. Greater investment in children will improve the next generation's productivity because the children will be better nourished, and will more likely have accessed some kind of education (Kabeer and Natali, 2013).

There are many benefits to empowering women, however, scholars are arguing empowering women may have negative effects, or that empowerment develops with economic growth. Duflo (2011) for example argues gender equality is the result of economic growth, not the other way around, and how this economic growth happens is not as important. She believes it starts with economic development, which leads to poverty reduction, and poverty reduction will increase equality since women benefit the most from poverty

reduction. However, this model is too simple and assumes economic growth will have a direct effect on poverty no matter how it happens. There are many cases where a country's economic growth increases but the poverty headcount remains the same or drops. The U.S. for example has a growing GDP and a growing poverty headcount. Year 2000 their GDP was 10.252 trillion \$, and 20.937 trillion in 2020 (The World Bank). Their poverty headcount has at the same time grown from 1.2% of the population 2000 to 1.7% in 2018 (The World Bank). When focusing on economic growth to achieve poverty reduction, it is important to focus it on the poor part of the population. This is what focusing on women in agriculture will do. Kabeer and Natali provide another contradictory argument which is that low-income countries may benefit from gender inequalities since it means cheaper labor which results in cheaper products. Cheap labor will attract investors which will benefit the country's economy. Nevertheless, cheap labor will only benefit the high-income countries who purchase their product, and there will not have much of an effect on poverty headcount.

Women empowerment in agriculture is a complex problem where access to land, finances, techniques, representation, and more, all play an important role. This analysis will narrow it down to the effects of women's access to credit and finances. It is important to understand how each resource has its economic effects. This analysis will specifically focus on how women's financial access can reduce poverty headcount. Because empowerment measures often are incomplete or not available, my research will use Morsy and Youssef's (2017) conclusion for policy recommendations to include women in the financial sector, as a base for the used financial data. They concluded lower women participation in the labor market, discriminatory laws and norms against women, the majority of state owned-banks, and weak bankruptcy and collateral laws protecting lenders and borrowers are factors excluding women from the formal financial sector. They also note that higher participation in the labor force can increase economic opportunities for women. The number of state-owned

banks is relevant when social stereotypes towards women perceive them as less creditworthy than men. Foreign banks without those stereotypes will therefore be more likely to provide banking services to women.

Theory

The more access to credit and finance women in agriculture get, the lower will their country's poverty headcount be. When looking at data from financial policies that include women in the labor force, I will find a correlation between inclusive policies, poverty headcount, equality, and other health aspects. In sub-Saharan Africa, women produce 80% of food crops and they sell them on local markets (Ben-Ari 2014), if receiving higher access to cash and credit their yields will rise which will provide food security for their villages. This is because credit allows women to acquire machinery, land, irrigation, fertilizers, hire labor, and obtain high-quality seeds (Ben-Ari 2014). Finances also provide women the ability to negotiate in the household which gives them more decision-making power over their fields. Access to credit will give women further access to necessary resources to improve yield. When the land use is not maximized, there will be no development and poverty will stay the same. This fairly small change will strengthen agriculture, food security, and will help those who are most vulnerable in their societies. Hence, focusing on women in agriculture will reduce the poverty headcount. When looking at Uganda and Kenya, the country with better financial and credit access should also have a lower poverty headcount.

Method

To find out if women's access to cash and credit can reduce poverty headcount, I have conducted a comparative analysis between Kenya and Uganda. I chose Kenya and Uganda because they are neighboring countries that share a similar climate, political situation, and culture. This is important to reduce outer conditions affecting the statistics that I am analyzing. The focus is statistics on the countries' economic conditions for women, poverty

headcount, other health factors, and gender equality. The economic factors I will look at are market concentration, foreign banks among total banks, percentage of female wage and salaried workers, strengths of legal rights, depth of credit information, women's labor force participation, financial access, and ease of doing business ranking. The health factors and gender inequality indexes I will cover are food insecurity, stunting among children, life expectancy at birth, domestic food price volatility index, human development index, gender development index, and gender inequality index. Thereafter, I will look for patterns between the economic, health, and equality statistics to determine if there is a correlation between women's access to cash and credit and poverty headcount. I will be able to look at financial policies that include women in the labor market without a specific focus on agriculture since the vast majority of Kenyan and Ugandan women work in agriculture. Financial policies that affect women will therefore strongly affect female labor in agriculture.

Result

Data from the World Bank (2016) defined Kenya's poverty headcount as 37.1% of the population (ratio at \$1.90 a day), and Uganda's as 41.5%. Hence, Kenya is doing better than Uganda in poverty headcount. Kenya is also having an advantage in the other health factors; USAID (2018) showed 29% of Ugandan children, and 26% of Kenyan children below age 5 are showing the prevalence of stunting; the life expectancy at birth for women is 65.17 in Uganda, and 68.68 in Kenya (Statista 2018). Further, the United Nations development program's Human Development Index (2020) scored Kenya with 0.601, and Uganda with 0.544. Moreover, 63.4% of the Ugandan people are suffering from moderate or severe food insecurity, at the same time as 56.5% of the Kenyan population does the same (The World Bank 2017). Kenya is also ranked higher than Uganda for gender equality. The Gender inequality index (GII) from UN Data (2019) accounts for maternal mortality, adolescent birth rate, women's share of seats in the parliament, women's education, and women's participation

in the labor force. After that, they ranked the countries, and Kenya was ranked 147th while Uganda was ranked 159th. Kenya's Gender development index from IMF (2013) was also slightly higher than Uganda's (Kenya 0.91, Uganda 0.90). In addition to the GII, the world bank (2020) provided data for the percentage of women over the age of 15 who are participating in the labor force; 66.93% of Ugandan women, and 72.01% of Kenyan women.

For the financial factors, Kenya is also superior to Uganda, nevertheless, Uganda has more foreign banks among total banks according to the World Bank (2013); 83% of Uganda's banks are foreign banks, and only 32% of Kenya's banks are foreign. The World Integrated Trade Solution (2019) shows that Uganda's market concentration is higher than Kenya's (Uganda 0.20, and Kenya 0.05); Kenya has 42.77% employed women who are receiving salary and wage, while Uganda only has 16.82% (The World Bank 2019); The World Bank's strengths of legal rights index (2019) scored Uganda as 5, and Kenya as 11 on a scale from 0-12 where 12 is the highest; Uganda's depth of credit information is scored 7 by the World Bank (2019), and Kenya are scored 8 (on a scale from 0-8 where 8 is the highest); The IMF (2020) scored Uganda with 2.58 on their Financial Access Survey (number of commercial bank branches per 100,000 adults), and Kenya was scored with 4.65. On the Ease of doing business ranking, Kenya was ranked as 56th while Uganda was ranked as 116th on the list (The World Bank 2020).

Change over time shows how poverty headcount in Kenya decreased at the same time as the percentage of wage and salaried women rose. Wage and Salaried women in Kenya were as low as 21.59% in 2005 and rose to 42.77% in 2019 (The World Bank 2019). The poverty headcount in Kenya was 43.9% in 2005 and shrunk to 37.1% in 2015 (The World Bank 2016). Kenya's female labor participation also increased from 2005, 60.28%, to 72.01% in 2019. Although, the participation rate dipped from 1999 where it was 70.11% to 60.28% in 2005, so the drastic increase from 2005 to 2019 shows how Kenya is recovering from the

ethnic conflict that started in 1999. The percentage of wage and salaried female workers, on the other hand, has not moved much from 1991 to 2006 where it started to rise a lot. Despite a few short spikes in the domestic food price volatility index, it has dropped in Kenya from 13.60 in 2005 to 6.00 in 2014 (Our World in Data 2014). The food insecurity rate has not had a recent update and only covers 2015-2017, therefore it is hard to see a change from 2005. Nonetheless, 2005 seems to have been a turning point for Kenya.

Uganda has had a steady drop in poverty headcount from 1999 where it was 67.5% to 41.3% in 2016. Nevertheless, their wage and salaried female workers percentage and women in the labor force remains low, with only a small increase from 1990. The poverty headcount is also currently rising in Uganda, while it is decreasing in Kenya. Uganda's domestic food prices are also high (21.80 in 2014), and they are not going in the direction of change. Food insecurity has been rising almost 10% from 2015 to 2018, and it is a lot higher than Kenya's food insecurity.

Conclusion

The result shows a correlation between various financial policies that include women in the labor market and lower poverty headcount. Kenya is doing better than Uganda in all aspects except for the numbers of foreign banks among their total number of banks. Nonetheless, the number of foreign banks is positive for countries with lower equality between males and females, so that credit can be offered to women from international banks with fewer biases. Since Kenya scored better than Uganda on all the equality indexes, the number of foreign banks does not have much of an effect on the result. The result suggests that improved policies including women in the labor force result in increased health and equality which will lead to a lower poverty headcount.

The financial factors that helped Kenya are important for women because they include them in the labor force. First, the degree of market concentration is important since

most women in Uganda and Kenya are small farm holders and will have a hard time competing against big companies who will get a monopoly in concentrated markets. Second, strong legal rights are particularly important for women in LIC because of their social status. They need to have the law on their side if they decide to go outside of the social norms, which the majority are when they are taking part in the labor market. Finally, depth of credit information is important for secure transactions, and ease of doing business and greater financial access will further help women get into the labor force. With these policies, women will be able to increase their own and their family's well-being, and they will be able to increase their yield. Increased yield will provide more food for their communities which would result in better food security and less malnutrition. Women would become more empowered, and their ability to make decisions of their own would further increase yield and well-being.

Furthermore, the poverty headcount is complicated because many factors contribute to it. Conflict, political stability, access to healthcare, resources such as water and arable land, education, inequality, and climate change, are only a few examples of what also affect poverty headcount. Even though there is a correlation with financial policies that benefit women in agriculture, it is hard to determine if that is the main reason for decreased poverty headcount. All factors are working together, for the better or the worse. What is important to note is how the factors are affecting each other, for example, better food security will lead to less malnutrition, which will then lead to a healthier and more productive next generation. Hence, this is why scholars are looking for policy changes with positive effects for several problems. Focusing on women in agriculture has multiple positive effects on their families and communities, which will decrease poverty headcount.

Though policies have a great impact on the availability of cash and credit for women, social, cultural, and religious aspects are also preventing women from taking

advantage of the benefits. Andrea Cornwall argues these social attitudes need to change before policies are even relevant. Though it makes sense and might be the case, policies can also change social norms and constructions. For example, the Iranian revolution in 1979 had big effects on women's clothing. Before the revolution, women could wear short sleeve shirts, pants, and other western style fashion, but after the revolution, they were forced to veil themselves. As the years go on, these policies affect the norms and if the law were to be taken away today, many women would still veil themselves. It is hard to know what comes first, if it is the policy change or the social change, or if they change together, but it is important to note how policies do affect social norms. Moreover, in this case, I will argue it has to do with policy changes because of how Kenya's poverty headcount decreased at the same time as, women in labor, and wage and salaried women workers increased. Since it increased/decreased so fast it is more likely due to policy changes since social changes happen slowly. Social changes will be shown as a slow increase/decrease on the curve, while policy changes can cause more drastic changes. Kenya also implemented an economic recovery strategy for wealth and employment creation policies in 2003, where the focus was to increase employment. This is probably a great contribution to the increase in female employment, and wage and salaried female workers.

Furthermore, there are more financial policies worth investigating, and these may also be more effective financial policies than those covered in this paper. Nevertheless, the lack of data in the studied region created difficulties to compare more financial policies. The direct effect each policy has on women in agriculture is not yet studied. Therefore, more nuanced studies focusing on each policy's effect on women in agriculture, and their access to cash and credit are needed to further understand the consequences. The poverty headcount index is also not the complete picture of people living below the poverty headcount ratio since women's status is based on their family's income. Many women do not have their own income

and cannot control their well-being. This paper specifically compares Kenya to Uganda, yet the thesis would be stronger if the same pattern was shown in more sub-Saharan African countries.

Nonetheless, this paper shows causation between lower poverty headcount and financial policies that include women in the labor market. The biggest impact on poverty headcount in this case study was the number of women participating in the labor force and accessing wage and salary. While Uganda's food insecurity is growing and their food prices are staying high, Kenya's increase in wage and salaried women workers have had a positive effect on their food security and food prices. Kenya has also through time had better access to the financial policies this paper analyzed which may have contributed to the big upswing in wage and salaried female workers in 2005. When the government implemented the economic recovery strategy for wealth and employment creation policies, job opportunities for women increased. It also affected women since most women in Kenya work in agriculture. Hence, the positive impact on food security and food prices. Uganda still struggles with implementing policies that include women in the labor force, and therefore they do not have the same pattern as Uganda does. Their poverty headcount still decreased a lot for some time, however, that is most likely due to their political situation. There were no significant differences in gender inequalities between the two countries, and the statistics have stayed fairly similar for a long time, so gender equality remains an issue in both countries. However, gender equality despite policy changes takes time, and I would expect equality in Kenya to grow faster than in Uganda due to their including financial policies.

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