

Sub-Saharan Africa and the agriculture gender gap: what can be done?

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Abstract

In Sub-Saharan Africa, women represent over 50 percent of the agricultural labor force of the region. While this is the case, they are reported to be 20-30 percent less productive due to the gender gap. There are different reasons for the strong gender gap in these countries. Due to cultural and social norms of the region, women in sub-Saharan Africa experience both time constraints and mobility limitations. In events such as divorce or widowhood, women are granted less access to male family laborers. Furthermore, women in the region struggle to access equipment and machinery as they lack cash income. Women also endure a difficulty when trying to access a high value crop enterprise as they are limited by the plot size and ownership. By closing the gender gap, sub-Saharan African countries will have the ability to buy, produce and sell more, which will lead to a decrease in poverty and an overall improvement in nutritional outcomes. In this paper, we have been able to differentiate four main categories of policies to close the gender gap in the agricultural sector. First, it is essential to strengthen women in the sub-Saharan society by tackling gender norms from the youth, change the perception of female farmers, and improve women's literacy levels. Secondly, giving access to labor and time saving tools and services are important steps to close the gender gap: by alleviating women's time burdens and mobility limitations, assisting women's access to hired labor, confronting gender norms around labor, introducing labor saving devices and improving infrastructure. Thirdly, policies revolving around an improvement in the access to non labor agricultural inputs such as access to fertilizers and pesticides and help women access credit more easily. Finally, the last category of policies to close the gender gap in sub-Saharan Africa is to strengthen women's land ownership rights with actions such as: reform large scale land titling and reform gender biases in laws.

Keywords: term, term, term

1. Introduction

While women represent over half of the agricultural labor force in Sub-Saharan Africa, they are reported, on

average, to be 20-30 percent less productive.¹ In Africa, 90 percent of the population is involved in agricultural activities, which account for one-third of the continent's GDP. Moreover, two-thirds of the African population relies on agriculture as a form of income. While the contribution of women in agriculture and providing food security is well known, gender inequalities in accessing and controlling production and financial resources create a problem for the country's productivity and retracts any efforts previously made. Indeed, the gender gap in farming activities is an important obstacle to the region's agricultural growth and development. Nearly 50 percent of the Sub-saharan labor force is women, yet, women are seen as low producers compared to men because of structural barriers. The main reason for this underperformance is women's inadequate access to productive resources aggravated by customary laws and institutions regarding inheritance and property rights. Despite the efforts made in the past years to revolutionize agricultural extension services to make them more gender mainstream, women in Sub-Saharan Africa are still not able to access most learning opportunities offered by rural advisory services. Shedding light on female farmers and introducing policies that close this gender gap in the Sub-Saharan African agricultural sector will produce substantial benefits not only for the women themselves and their families but also for the region's economy as a whole. It is important to note that the perseverance in accomplishing women's empowerment

¹ Ali, Daniel. "Investigating the Gender Gap in Agricultural Productivity."

from an agricultural production perspective must consider gender roles and intra-household differences.²

This paper will consider the following: How can Sub-Saharan African countries overcome their gender gap in agriculture? It will provide examples of three Sub-Saharan countries: Uganda, Malawi, and Tanzania. First, this paper will look at the causes of the gender gap by examining cultural examples and the legal actions taken by governments. Then, the paper will look at the benefits of closing the gender gap, both economically and socially. Finally, it will describe policy recommendations targeted to these three specific countries, but that can be scalable to a certain extent.

2. The gender gap and its causes

In 2015, UN Women highlighted the idea that a decrease in the gender gap can lead to a significant amelioration of poverty. However, Sub-Saharan African women face a number of challenges that prevent them from gaining information and abilities to take part in their country's agricultural sector.

2.1: Time constraints and mobility limitations

Oftentimes, women in Sub-Saharan Africa take full responsibility for household chores such as childcare, taking care of the sick, cooking, and cleaning. Moreover, women are left with tasks such as the assortment of wood, the storage of water, and the care of backyards and

² Agholor, A. I. "Gender Gap in Sub-Saharan Africa, Reminiscence of Rural Extension and Advisory Services: Delineation, Challenges and Strategies."

gardens.³ Because of these duties, women have much less time to participate in agricultural activities. Moreover, female farmers also have to deal with restricted mobility and existing social and cultural barriers that make it impossible for women to leave the community borders.⁴

2.2 Limited access to male family labor

Table 1 shows how this element plays one of the most significant roles in the gender gap in agricultural productivity. In the event of a divorce, widowhood, or separation, women are granted less access to male family laborers. Social norms around gender worsen this issue, making it very difficult to hire male wage labor. In addition, women have high burdens of unpaid care and unpaid domestic work, which does not allow them to have a lot of time to invest in agriculture-related activities and worsens the quality of women’s labor.

In Tanzania for instance, women find it very difficult to access male family labor. This explains almost entirely the gender gap and costs the country over 102 million dollars. In Malawi, the inequitable access causes over 45 percent of the agricultural productivity gap in the country. However, it appears that in Uganda the access to male labor does not play an important role in explaining the gender gap issues in the country.⁵ This can be explained by the

implementation of gender-responsive budgeting, which has provided some kind of safety net for women.

Table 1. Decomposing the gender productivity in agriculture in five countries

Driver	Ethiopia		Malawi		Rwanda		Tanzania		Uganda	
	Gap (%)	Gap in GDP (mil. \$)	Gap (%)	Gap in GDP (mil. \$)	Gap (%)	Gap in GDP (mil. \$)	Gap (%)	Gap in GDP (mil. \$)	Gap (%)	Gap in GDP (mil. \$)
Access to male family labour	45.7	89.0	45.2	45.1			97.3	102.1	—	—
Planting of high-value crops	—	—	28.4	28.4			3.0	3.2	15.3	8.9
Use of equipment/implements	—	—	17.8	17.7			8.2	8.6	9.0	6.0
Use of pesticides	45.3	92.2	1.0	1.0			12.0	12.6	4.5	3.0
Use of inorganic fertilizer	25.1	51.0	5.3	5.3			6.4	6.7	3.0	2.0
Health index	—	—	5.3	5.3			-0.1	-0.1	—	—
Yield of household farm production					67.0	280.5				
Household size					22.5	94.1				
Spending on insecticides					12.8	53.7				
Years of education					11.5	48.3				

URCES: Ethiopia Ministry of Agriculture and Natural Resources and UNDP-UNEP PEI Africa, 2011; UN Women and UNDP-UNEP PEI, 2015; UN Women, UNDP-UNEP PEI and World Bank, 2015.

2.3 Use of implements and machinery

Another factor that explains 18 percent of the gender gap in Malawi, 8 percent in Tanzania, and 9 percent in Uganda is **the use of implements and machinery**. The main reason for this imbalance is the difficulty for women to access equipment as they lack cash income since they spend most of their time doing unpaid work.⁶ Since women struggle to access inorganic fertilizers which need to be bought in the marketplace, they depend more on organic fertilizers which can be made with the livestock of a family. While these organic products can positively affect the quality of the soil, Sub-Saharan African women’s habituation creates a productivity gap in contrast to that of men, who tend to use more chemical fertilizers. This particular aspect of the use of implements and machinery plays a very significant role when explaining Tanzania’s

³ ACTIONAID International.

⁴ Food and Agriculture Organization of the United Nations. “THE STATE OF FOOD AND AGRICULTURE 2010-2011.”

⁵ UN Women Regional Office for Eastern and Southern Africa “The Cost of the Gender Gap in Agricultural Productivity: Five African Countries,”

⁶ Ibid

gender gap, as it accounts for one-fifth of the agricultural productivity gap.⁷

2.4 Limited access to high-value crops enterprise

Finally, the last challenge faced by women is the **limited access to high-value crops enterprise**. This gender difference accounts for 28 percent of the gender gap in Malawi, 3 percent in Tanzania, and 13 percent in Uganda. This accounts for a loss in GDP of over 28 million dollars, 3.2 million dollars, and 9 million dollars respectively. In general, high-value crops, which include cash crops and exported crops, are more produced and farmed by men. At the same time, women tend to plant more subsistence crops, which are crops cultivated to be consumed by the household for no economic profit. Qualitative reports indicate that these differences in crop farming are due to social norms, dictating that women need to provide for household food production. Furthermore, oftentimes women are not able to scale up from the production of subsistence crops because they are limited by the plot size and ownership. The lower probability for women to farm high-value crops can also be seen as an outcome of the limited access to tools and extension services provided for climate change because of the lack of cash income that most women experience and also because of their lack of time. In Uganda, this gender differential accounts for the highest gender gap in the productivity of agricultural activities. Indeed, women in the country seem to be burdened by constraints involving time and money because

⁷ Ibid

of their unpaid domestic work. Moreover, Ugandan women cannot work on their own land due to social norms, which pushes them to work on lands shared with their husbands.⁸

3. What would countries gain from closing the gender gap in agriculture?

By eliminating the gender gap in agriculture, Sub-Saharan African countries will gain a lot of influence due to the ability to buy, produce, and sell. As a result, there will be a decrease in poverty and an overall improvement in nutritional outcomes. Food security takes many institutions into account, not only agriculture but also health and education. According to the Regional Bureau for Africa of the United Nations Development Programme, it is unlikely that a strategy only based on agriculture or food will bring an end to nutrition security, but it will help to decrease it.⁹

Indeed, it has been explained that leaving women out of labor activities could make it harder to eradicate poverty, increase economic productivity, and increase economic growth.¹⁰

If there were an increase in women's access to land, labor and equipment, this would also increase productivity in the agricultural sector, income, and the volume of crop

⁸ Ibid

⁹ Fanzo, Jessica. "The Nutrition Challenge in Sub-Saharan Africa." United Nations Development Programme

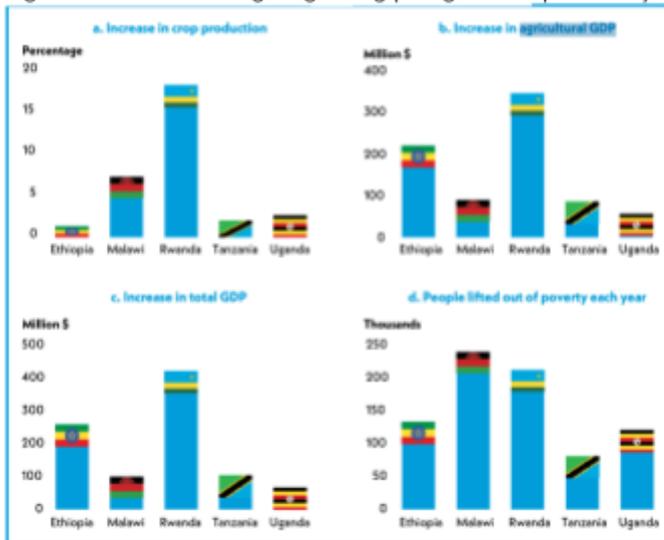
¹⁰ "Growth and Economic Opportunities for Women: Literature Review to Inform the DFID-IDRC-Hewlett Foundation Research Program on Women's Economic Empowerment, Gender Equality and Growth in Low Income Countries."

production. Figure 1 shows the important increase in the country's agricultural GDP, crop production, and overall GDP if there were a closure of the gender gap.

4. Policies recommendations for the closing of the gender gap in the agricultural sector

To close this gender gap in agricultural productivity,

Figure 1. Gains from closing the gender gap in agricultural productivity



SOURCES: Ethiopia Ministry of Agriculture and Natural Resources and UNDP-UNEP PEI Africa, 2017; UN Women and UNDP-UNEP PEI, 2015; UN Women, UNDP-UNEP PEI and World Bank, 2015.

It is interesting to point out that closing the gender gap in Malawi, which is the Sub-Saharan country with the most substantial gender productivity gap, would lead to a lower increase in the production of crops than Rwanda, which has a gender productivity gap of 11 percent. This means that the productivity of Rwanda seems to be greater, which could be seen as an affirmative sign that there are positive conditions for not only gender equality in general but gender equality in the agricultural sector. Furthermore, closing the gender gap in agriculture will cause an important reduction in poverty. In Tanzania, at least 80,000 Tanzanians would be lifted out of poverty per year over ten years. As shown in the figure, all the countries will gain positive changes by closing the gender gap in agriculture productivity, even if at different scales.

there are many different policies which we can categorize into four different categories: strengthening women in Sub-Saharan society, giving women access to labor and time-saving tools and services, facilitating Sub-Saharan women's access to agricultural inputs that are non-labor, and finally reinforcing women's land rights and ownership.

4.1 Strengthening women in Sub-Saharan society

4.1.1 Tackle the problem from youth

What is important to note when looking at gender inequality is that it is a vicious cycle. To break this cycle, it is essential to start tackling this **problem from youth**. By applying specific interventions during adolescence, one can protect them from unwanted teen pregnancies, encourage them to stay in school and engage them in training of

different skills. For instance, in Rwanda, the World Bank's Adolescent Girl Initiative offers technical training for self-employment in areas such as food processing and agri-business, psychological support as well as life and business skills in order to be able to establish a profitable small business and the support to form cooperatives with the help of business mentors. Results of this initiative show that the beneficiaries had a much greater self confidence.¹¹

4.1.2 Changing the perception of female farmers

Rural advisory services usually perceive farmers in Sub-Saharan Africa by the head of households specialized in farming, the owners of the lands, or the person that is entitled to the revenue. These biases can cause challenges to women as they might not be able to own land, and they might provide their labor to land owned by males. Moreover, by using the term "farmers," women can be excluded and not be considered as real farmers. This would also mean exclusion from rural advisory services provided in the country. It is essential to find a way to make the agricultural world more gender inclusive: from pictures of posters to education. Education can play a very important role in this case, by highlighting from a young age that farming has no gender. This can be done by picturing both male and female farmers in school books. By doing so, the future generations would be less gender-biased, and women will not feel intimidated or judged in doing such a job.

¹¹ World Bank. "Adolescent Girls Initiative."

4.1.3 Improve women's literacy levels

While reading classes exist, most times they are not catered towards women. It should also be imperative for the classes to provide not only homogeneity between men and women but also guarantee the continuity of classes. In order to do so, NGOs play a crucial role. Indeed, cooperatives such as Digital Greens and Access Agriculture are able to give access to knowledge to less educated local women that would like to be farmers by providing videos with demonstrations, and information showing good practices of farming and agriculture.¹² These videos are very useful, as the messages conveyed are most of the time specific to the person's watching needs and circumstances. With the guidance of a facilitator, farms can pick and introduce innovations, between the ones proposed in the videos, once the farmers finish watching the videos. This is because the training materials that are shown in pictures, plays, or stories are much easier to understand. (Carter & Weigel, 2011) www.shareweb.Ch/site/Agriculture/Food

4.2 Giving women access to labor and time-saving tools and services

4.2.1 Women's time burden and the mobility limitations

As previously explained, Sub-Saharan women experience difficulties being able to move freely on their own, making it very difficult for them to access the resources needed to take part in the agricultural sector of the country's economy. In Ethiopia, men were incentivized

¹² Harvin , Kerry. "Lessons Learned from Locally Produced Videos – the Approach of Digital Green in India -."

to bring their wives to sessions devoted to training by the EMPOWER program. As a result, women were able to have easier access to agricultural innovations.¹³ Moreover, it is also important to point out that the easiest way to deliver agricultural training to Sub-Saharan women would be to perhaps deliver it directly to their homestead or close to the land they use for their cultivation, so that they won't have to move too far away.

4.2.2 Assist women's access to hired labor

Because of the strong social norms present in Sub-Saharan Africa, for instance norms that dictate the different tasks that women and men have to take on regarding agriculture, women might feel intimidated to hire male labor. To challenge these ideas, educational campaigns, catered to both men and women could be put into place to guarantee the success of policies aimed to give women the ability and the courage to hire wage laborers without gender being an issue. The message that these educational campaigns would want to convey is first and foremost equality: there is no difference in working for a man than for a woman. In this way, women will feel more empowered to actively look for potential laborers, as well as for men to be more keen on the idea of working for a woman.

4.2.3 Confront gender norms around labor

In order to educate the general public about the gains of reducing and relaxing the very rigorous gender and cultural

¹³ Cybercom. "Gender Aware Approaches in Agricultural Programmes:"

norms regarding agriculture in their country, educational programmes aired on national television can be launched. But since the lower class of most Sub-Saharan countries do not have access to television, the educational programmes should be supported by policymakers and especially community leaders. Their role would be to highlight the importance of women in agriculture with the help of evidence. Moreover, easier ways to deliver agricultural skills and education will be made more effective by giving cash transfers when hiring for labor and delivery at home for both equipment and training. In Zambia, a study that investigates the impact on nutritional outcomes of receiving cash transfers through Social Cash Transfers (SCT) found that these transfers had an overall positive impact on household consumption, diet diversity, and self reported food security. This means that not only cash transfers can be an effective way to tackle this issue, but it could also help ameliorate the country's malnutrition if used properly.¹⁴

4.2.4 Introduction to labor-saving devices

It is essential to give women the possibility to spend less time doing household duties and chores so that they can have more time to invest in agricultural activities for economic gain. By providing them with an energy-efficient and environmentally friendly cooking stove, women will decrease the time spent cooking. Moreover, by digging wells, women can also reduce the burden of household

¹⁴ Seidenfeld, David. "The Impact of an Unconditional Cash Transfer on Food Security and Nutrition: The Zambia Child Grant Programme."

work. Indeed, in Burkina Faso, many different organizations started to construct wells, give different communities carts for them to haul wood, build ovens, and introduce them to hullers and grain mills to be converted into flour. In Burkina Faso, many women were spending most of their time doing repetitive activities with basic tools. When it came to water, most of it was polluted and was a source of sickness such as diarrhea. Furthermore, women had to fight over water and had to transport it across long distances. When raised wells were constructed, it was protected from contamination and diseases. The education towards purification of water through charcoal filters or boiling were also put in place.

Scarcity of wood is another major issue in Burkina Faso. It is a very time consuming activity which forces women to walk many miles to find fuel. To solve this problem, hauling wood, fuel efficient ovens and even solar cookers were put into place. Most women in Burkina Faso also struggled with the transformation of grain into flour. Grain mills were introduced alongside educational programmes for their usage and maintenance, which play a very important role in these projects to ensure sustainability. Evidence suggests that by introducing these new technologies, women's workload saw a decrease, and they were able to partake in economically driven activities.. This is an interesting approach, as women in Burkina Faso and Uganda, Malawi and Tanzania all do similar housework as the ones listed below. By providing them with these tools, women would have more time to dedicate

themselves to more profitable activities such as agriculture.¹⁵

4.2.5 Infrastructure improvement

The absence of infrastructure in rural areas is often an important driver of unpaid domestic work for Sub-Saharan women. Investing in improving infrastructure would contribute to economic growth and a step forward to closing the gender gap. With electrification programs in rural South Africa, there was an increase in employment by five years, which allowed micro-enterprises and liberated women from housework. With the help of electrification, there was a decrease in the need and use of wood, and more people started to adopt electric lighting and cooking. In India, because of the 2005 National Rural Employment Guarantee Act, which focused on the improvement of infrastructure, there was a decrease in unpaid work for women but also environmental conservation. The Act guarantees each rural household a minimum of one hundred workdays per year. Their goals were to increase not only wage employment but also wage security. As secondary goals, there was also the eradication of underlying reasons for poverty, such as deforestation and soil erosion. According to Alain Hiart, a sustainable agriculture and environment expert, the link between poverty and deforestation can be seen as a vicious cycle. In the case of the Democratic Republic of Congo, 84 percent of deforestation is due to small-scale clearing of forest. The drivers of deforestation are: slash and burn agriculture, the

¹⁵ Frisanco , Jennifer. "The Quest for Gender Equality in Burkina Faso: Female Workloads, Education and Empowerment,"

production of charcoal for the distribution in urban centers, and informal artisan logging.¹⁶

Slash and burn agriculture is very common in Southern Africa, which results in a poverty trap for small farmers. This type of agriculture consists in cutting down trees of a round plot of land, staking the branches and burning them. The problem with this method of farming is that when a soil has been cultivated by following this method for a couple of years, it must not be touched for at least twenty years. This creates a vicious cycle, since the farmers would be unable to plant in that plot for many years, which results in not only a loss of income but also of nutrient food.

It is also important to point out the beliefs behind burning soil. In Mozambique, farmers believe that evil spirits circulate on their fields during the rain season. In their culture, these spirits bring diseases and bad luck. That is why they feel like they must burn them.¹⁷

4.3 Improve women's access to non-labor agricultural inputs

4.3.1 Access to fertilizers and pesticides

Women in Sub-Saharan Africa have very low spending power. For this reason, they face challenges when spending on agricultural inputs. Malawi has a long-term commitment to agricultural input subsidies. For instance,

¹⁶ "Deforestation: Why Poverty Is the Root Cause."

¹⁷ Kruchem, Thomas. "Small Farmers in Southern Africa Cannot Make a Living from Their Inefficient Slash-and-Burn Agriculture."

Malawi's Farm Input Subsidy Program was useful in closing the gender gap for maize adoption. While the receipts of subsidized coupons saw no difference in men-dominated households, in households where women were at the head, the coupons had a positive influence on the receipt of the coupon, which consisted of maize seed and fertilizer coupons.

4.3.2 Women's access to credit

Women find it very hard to open a line of credit, which is essential for land ownership. This is also because many institutions see women as risky clients because they usually have a smaller level of education and fewer skills. Initiatives such as the Grameen Bank model in rural Bangladesh have provided over 2.1 billion dollars in loans to 2 million households, the vast majority being to women. This serves as a very powerful example of how providing small-scale loans using microfinancing can result in an incentive to promote female agricultural activities and economic welfare.¹⁸

However, some research has shown that microfinancing can have only small advantages for women; instead, a more effective policy is reforming banking policies by having more banking branches open in rural areas. India reformed its banking policies by requiring banks to open branches in previous unbanked locations. Furthermore, the government also put in place deposit and lending policies in order for Indians to use the new banks. As a result, saving rates were higher and lending rates lower than in

¹⁸ "Grameen Bank."

urban areas of the country. According to Menon and Rodgers,¹⁹ the availability of credit because of this program was especially beneficial to women. Moreover, to help low-income women, it is essential to provide them with capital, training, and financial services.²⁰ As a result, those services will increase women's understanding and knowledge of how to handle their income and economies and ensure that some of it is spent to increase agricultural productivity.

4.4 Strengthen women's land ownership rights

4.4.1 Large-scale land titling reforms

It is proven that when female farmers have control over land, their productivity increases. It is vital that land laws are changed in a way in which women can swap, lease, sell, or even easily mortgage their land. Many countries have started to put in place large-scale land titling programs that indicate that joint titling for married couples can be an effective way for women to have more rights regarding land ownership. Providing mandatory joint titling would result in the likelihood of women having more rights regarding land ownership as voluntary joint titling can be a less effective measure, especially in countries where social norms are very strict.

¹⁹ Menon, Nidhiya, and Yana Rodgers (2011). "How access to credit affects self-employment: differences by gender during India's rural banking reform". *Journal of Development Studies* 47 (1): 48–69

²⁰ Buvinić, Mayra, and Rebecca Furst-Nichols (2016). "Promoting women's economic empowerment: what works?" *World Bank Research Observer* 31 (1): 59–101.

In Rwanda, a large-scale Land Tenure Regularization program brought greater land security and positive effects on agricultural investment, particularly in households where women are at the end of the family.²¹ With this program, land rights were clarified, tribal conflicts were reduced, and so was the discrimination in land access. As a result, married women had more access to land, and documentation for inheritance rights were improved. In many Sub-Saharan countries, there are still arbitrary inheritance and property rights when it comes to women because of the competing laws and legal status.

4.4.2 Reform gender biases in laws

There is a need for more attention to gender relations and power structures in rural areas, which is where women are often disadvantaged in land ownership. A state-sponsored effort needs to be addressed by both customary law and also women's right to property. There also needs to be attention to the enforcement of these laws, especially in under-resourced areas.

5. Conclusion

To sum up, Sub-Saharan countries suffer from a gender gap in agriculture. This is because of different reasons. Women in Mali, Tanzania, and Uganda suffer from time constraints because of the amount of domestic work they have to do and mobility limitations for cultural reasons. Women also have difficulties in hiring male family labor, difficulties in accessing equipment due to lack of income and the limited access to high value crops. These three

²¹ Ali, Daniel Ayalew, Klaus Deininger and Markus Goldstein. "Environmental and gender impacts of land tenure regularization in Africa: pilot evidence from Rwanda."

Sub-Saharan countries would deeply benefit by closing this gender gap in the agriculture sector. The countries would become a power economy, help the fight against poverty, and have an increase in their total GDP and crop production.

There are several ranges of policies that can be implemented to close the gender gap in agriculture in these three Sub-Saharan countries. The first category of policies revolves around the strengthening of women in Sub-Saharan society. This process should start from giving young girls the tools and skills to thrive economically in a society. It is also important to change the perspective around female farmers, this can be done at two different levels: with pictures in books and education during childhood and more representation in the media of female farmers in adulthood.

The second category is giving women access to labor and time saving tools and services. Training should be taught also for women who cannot leave the house or should require both members of the family to attend. It is also important to assist women when hiring male laborers and to confront gender norms around labor in order to make it more inclusive. Two other important aspects when granting women access to labor and time saving tools and services is to provide labor saving devices such as energy efficient cooking stoves, wells, and mills. Infrastructure also plays a key role in this issue by giving access to electricity for instance.

However, in order to efficiently close the gender gap in agriculture, women also need access to non labor agricultural inputs. This can be done by giving women

access to fertilizers, pesticides, and credit. Finally, it is also important to strengthen women's land ownership rights by reforming land titling and gender biases in laws.

Bibliography

- Seidenfeld, David. "The Impact of an Unconditional Cash Transfer on Food Security and Nutrition: The Zambia Child Grant Programme." Accessed June 21, 2022.
<https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/4385/Zambia%20Special%20Collection%20pages%2048-54.pdf?sequence=2&isAllowed=y>.
- ACTIONAID International. Accessed June 21, 2022.
<http://www.actionaid.org/publications/making-care-visible>.
- Agholor, A. I. "Gender Gap in Sub-Saharan Africa, Reminiscence of Rural Extension and Advisory Services: Delineation, Challenges and Strategies." *South African Journal of Agricultural Extension*. South African Society for Agricultural Extension (SASAE). Accessed June 21, 2022.
http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0301-603X2019000300004.
- Ali, Daniel. "Investigating the Gender Gap in Agricultural Productivity." FAO, 2015.
<https://www.fao.org/family-farming/detail/es/c/331876/>.
- Cybercom. "Gender Aware Approaches in Agricultural Programmes." Sida. Accessed June 21, 2022.
<https://www.sida.se/publikationer/gender-aware-approaches-in-agricultural-programmes>.
- "Deforestation: Why Poverty Is the Root Cause ." Impakter, August 9, 2021.
<https://impakter.com/deforestation-why-poverty-root-cause/>.
- Fanzo, Jessica. "The Nutrition Challenge in Sub-Saharan Africa ." United Nations Developing Programme ,

2012.

<https://www.undp.org/content/dam/rba/docs/Working%20Papers/Nutrition%20Challenge.pdf>.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. "THE STATE OF FOOD AND AGRICULTURE 2010-2011." The state of Food and Agriculture 2010-2011, 2011.
<https://www.fao.org/3/i2050e/i2050e00.htm>.

Frisanco, Jennifer. "The Quest for Gender Equality in Burkina Faso: Female Workloads, Education and Empowerment," 2005.
http://www.brendamcsweeney.com/wp-content/uploads/2012/01/Gender_equality_in_Burkina-Faso.pdf.

"Grameen Bank." Grameen Bank - an overview | ScienceDirect Topics. Accessed June 21, 2022.
<https://www.sciencedirect.com/topics/earth-and-planetary-sciences/grameen-bank#:~:text=The%20Grameen%20Bank%20model%20is,94%20percent%20have%20been%20women>.

"Growth and Economic Opportunities for Women: Literature Review to Inform the DFID-IDRC-Hewlett Foundation Research Program on Women's Economic Empowerment, Gender Equality and Growth in Low Income Countries." Equal Footing, 2013.
<http://equal-footing.org/reports/growth-and-economic-opportunities-for-women-literature-review-to-inform-the-dfid-idrc-hewlett-foundation-research-program-on-women-s-economic-empowerment-gender-equality-and-growth-in-low-income-countries/>.

Harvin, Kerry. "Lessons Learned from Locally Produced Videos – the Approach of Digital Green in India." US AID, 2013.
<https://static1.squarespace.com/static/593ef400d2b85780fbc82544/t/5d700a34e197550001694b6e/1567623736679/MEAS+CS+India+-+Digital+Green+-+Kerry+Harvin+-+Nov+2013.pdf>.

Kruchem, Thomas. "Small Farmers in Southern Africa Cannot Make a Living from Their Inefficient Slash-and-Burn Agriculture." D+C, September 5, 2014.

<https://www.dandc.eu/en/article/small-farmers-southern-africa-cannot-make-living-their-inefficient-slash-and-burn#:~:text=Slash%2Dand%2Dburn%20agriculture%20is,be%20necessary%20to%20improve%20matters>.

UN Women Regional Office for Eastern and Southern Africa (. "The Cost of the Gender Gap in Agricultural Productivity: Five African Countries," 2018.
<https://stg-wedocs.unep.org/bitstream/handle/20.500.11822/28383/CostGenderGap.pdf?sequence=1>.

World Bank. "Adolescent Girls Initiative." World Bank. Accessed June 21, 2022.
<https://www.worldbank.org/en/programs/adolescent-girls-initiative>.