

Disempowerment by gender in Agriculture: Evidence and implications for interventions

Introduction

Gender refers to the socially constructed roles, responsibilities, rights power, needs and constraints of men and women within a given society¹. Despite a global focus on gender equality, many persistent factors contribute to the disempowerment of women and men. Both men and women are involved in agriculture, but the kind and degree of their involvement differs based on the structure of the economy and gender norms. Women contribute significant time and labor in agriculture from growing and managing crops to tending livestock². Despite this, women's contributions are either undervalued by prevailing societal norms or gender-specific barriers, largely contributing to women disempowerment³. These constraints range from control of fewer resources, less decision-making power over household income and time constraints due to their triple burden of domestic, productive and community responsibilities.

Despite benefiting from historic and perpetual gender inequality and the subordination of women in the form of patriarchal privilege, some argue that men also experience disempowerment⁴. The perceived men's social value and self-esteem may be undermined by socioeconomic consequences of unemployment, economic shocks, and natural disasters⁵. Research from rural Kenya and urban Tanzania suggests that traditional male roles and responsibilities have been undermined, and many men have been increasingly disempowered⁶. When men fail to live up to social and familial expectations, women who bear the brunt of the increasing responsibilities may treat them with contempt. Yet, while the impact of socioeconomic change on women's lives has been widely documented, such documentation focusing on men is in infancy.

Fostering gender equality and women's empowerment in agriculture is essential to economic development because it can improve women's and children's health and household productivity⁷. Despite agriculture's significant contribution to livelihood, the sector is facing a decline due to natural resource depletion and soil erosion⁸. Similar challenges are facing Kenya's Great Rift valley region covering Uasin Gishu and Elgeyo Marakwet Counties, which is the focus of this study. The area is home to Kenya's Cherangany Hills, North Mau, and Elgeyo Hills watersheds. Despite this, these counties are facing a challenge: meeting the growing demand for water and land degradation. There is a growing interest by public-private water funds in these watersheds to implement nature-based solutions for sustainable soil and water conservation approaches for agricultural sustainability. Yet, gender-based constraints hinder the uptake of these approaches.

It is crucial to learn more about the factors that contribute to men's and women's disempowerment and how their interactions either support or undermine efforts to empower more women. Further, agricultural development interventions offer substantial potential to increase women's autonomy and empowerment. Women's empowerment influences agricultural productivity⁹. However, fewer studies have looked at how efforts to increase women's empowerment may or may not impact men's empowerment¹⁰. This paper thus focuses on assessing disempowerment by gender how and why the sources of disempowerment differ, and implications for interventions.

¹ Gathaara et al., (2011). Gender, soil and water conservation in Machakos district, Kenya. *African Crop Science Conference Proceedings*, Vol. 10. pp. 319 – 322.

² Malapit et al., (2020). Women: Transforming food systems for empowerment and equity. 2020 Global Food Policy Report: Building inclusive food systems (chapter 4, pp. 36–45). International Food Policy Research Institute.

³ Quisumbing et al., (2021); pro-WEAI for Market Inclusion Study Team. Women's empowerment and gender equality in agricultural value chains: evidence from four countries in Asia and Africa. *Food Secur*;13(5).

⁴ Wanner and Wadham (2015). Men and masculinities in international development: 'men-streaming' gender and development? *Dev Policy Rev*. 2015;33(1):15–32. <https://doi.org/10.1111/dpr.12090>.

⁵ Silberschmidt (2001). Disempowerment of men in rural and urban East Africa: implications for male identity and sexual behavior. *World Dev*;29(4):657–71.

⁶ Yang et al., (2001). Changing male roles in rural and urban East Africa: The implications for male identity, sexuality, and sexual behaviour SESSION VIII. *Biological Reactive Intermediates* 6.

⁷ Peralta, A. (2022). The role of men and women in agriculture and agricultural decisions in Vanuatu. *Asia & the Pacific Policy Studies*, 9(1), 59–80. <https://doi.org/10.1002/app5.344>

⁸ FAO (2019). Mainstreaming gender for sustainable soil management. *Global Forum on Food Security and Nutrition*.

⁹ Diiro et al., (2018). Women's empowerment in agriculture and agricultural productivity: evidence from rural maize farmer households in western Kenya. *PLoS ONE*;13(5): e0197995.

¹⁰ Crookston, B.T., West, J.H., Davis, S.F. et al. Understanding female and male empowerment in Burkina Faso using the project-level Women's Empowerment in Agriculture Index (pro-WEAI): a longitudinal study. *BMC Women's Health* 21, 230 (2021). <https://doi.org/10.1186/s12905-021-01371-9>

Conceptual framework

In this paper, we define women’s empowerment as their ability to make strategic life choices, especially in contexts in which this ability had been denied to them¹¹. Within the theoretical context of Kabeer’s (1999) empowerment concept, the Pro-WEAI is a comprehensive measure composed of 12 indicators of women’s empowerment in agriculture that are mapped into three domains (Fig 1): intrinsic agency (power within), instrumental agency (power to), and collective agency (power with)¹². Intrinsic agency measures self-respect and internal empowerment of an individual. People who feel uncomfortable acting based on what is best according to their own judgment or who have internalized the notion that they are subordinate, fearing that their actions will not be accepted by the community, are not considered empowered. Instrumental agency measures economic empowerment, which considers a person’s access to productive resources and their ability to make decisions about these resources. Collective agency considers a person’s social power and influence in the community.

Domain	Indicator
Intrinsic agency	Autonomy in income
	Self-efficacy
	Attitudes about intimate partner violence (IPV) against women
	Respect among household members
Instrumental agency	Input in productive decisions
	Ownership of land and other assets
	Access to and decisions on financial services
	Control over use of income
	Work balance
	Visiting important locations
Collective agency	Group membership
	Membership in influential groups

Fig 1: The domains and indicators in pro-WEAI

Methodology

We conducted a baseline household survey for the Eldoret-Iten Water Fund project to measure Women Empowerment in Agriculture based on The Pro- Women’s Empowerment in Agriculture Index (Pro-WEAI). For the pro-WEAI quantitative data collection, the survey was piloted from June 28 to 30, 2022. Field campaigns for baseline data collection was done from 1st July to 3rd Aug 2022. In the Pro-WEAI, the primary male and female adults in each household were interviewed. The data was analysed using STATA version 14.1. Complementary data was collected from focus group discussions, and key informant interviews.

A six-tier sampling process was adopted. The first tier digitized all the households within Tambach, Moiben, Two-Rivers, Kipkaren and Kesses sub-catchments from the world imagery basemap. The second tier involved randomly selecting 30 village points found within the catchment area. The third tier overlaid the 30 selected villages with the 2009 Kenya National Bureau of Statistics sub-locations layer to determine the sub-locations where the 30 villages are located. This generated 24 sub-locations (Figure 2).

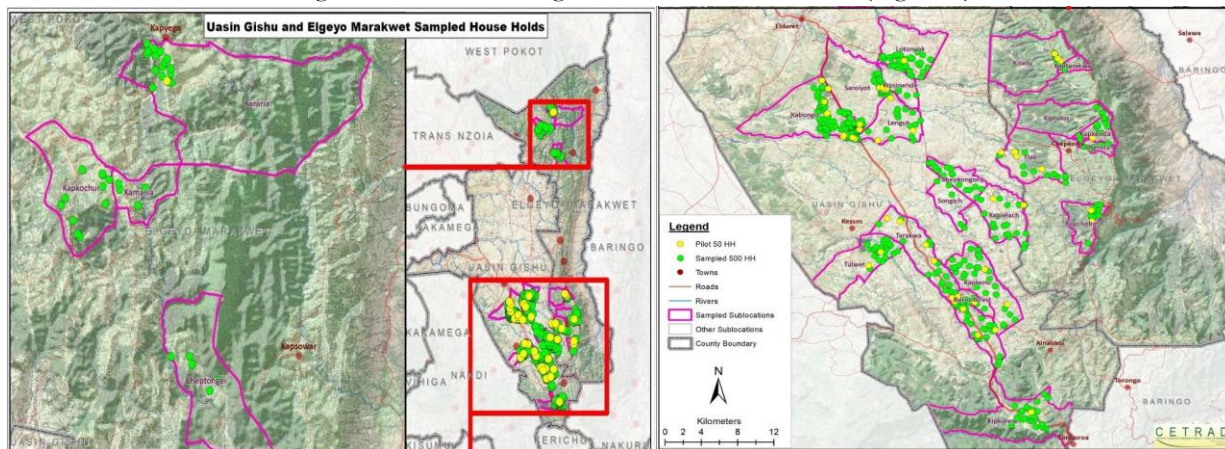


Fig 2: Map showing the 24 sublocations and 550 sampled household.

Next, using the Kenya Population and Housing Census (KPHC) 2019 data, we got the number of households in each sublocation. The fifth tier, determined the sample size for each sublocation using this formula:

¹¹ Kabeer (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment Development and Change, 30 (3), pp. 435-464.

¹² Malapit et al. (2019). Development of the project-level Women’s Empowerment in Agriculture Index (pro-WEAI). IFPRI Discussion Paper 1796. Washington, DC: International Food Policy Research Institute (IFPRI).

$$n_x = \frac{h_x}{H} \times N$$

where n_x is the sample size in each sublocation, h_x is the total number of households in each sublocation, H is the total number of households in the 24 sublocations and N is the desired sample size (in this case 550 households). Finally, 50 households were randomly selected from the 550 household for pilot study and the remaining 500 for the main household survey. In each household, a female and male adult were interviewed making a total of 1100 interviews.

Data analysis

Pro-WEAI was calculated as the weighted mean of two sub-indices: the Three Domains of Empowerment Index (3DE), with a weight of 90 percent, and the Gender Parity Index (GPI), with a weight of 10 percent¹³. The 3DE measures women's achievements across three domains – intrinsic agency, instrumental agency, and collective agency. The GPI compares the empowerment scores of the eligible individual and spouse in each dual-adult household. Improvements in either the 3DE or GPI will increase pro-WEAI scores.

Preliminary results

General Understanding of Empowerment

Focused Group Discussions (FGDs) held in the project area, revealed that the differing definitions and understanding of the term are mainly informed by the geographical space, gender and ethnicity. Among the communities who inhabit the upper zone (indigenous cluster) of the project area, both men and women said empowerment has to do with fair division of labour/shared responsibilities, shared decision making and happy living. Women who make decisions on their own without consulting their spouses are regarded as errant, disloyal, and un-submissive and therefore lowly regarded within the community. Among the communities in the middle zone of the project area, empowerment has fully to do with decision making which they say should be consultative at the household level. Where a woman is perceived by the community as to make major household decisions, she is regarded as domineering and controlling. In the lower zone (Uasin Gishu county sublocations) of the project area, both men and women FGDs revealed that empowerment has to do with financial independence and decision making. In this zone of the project area, the participants for both men and women FGDs agreed that women in the area were more empowered as most men (estimate of 50-60%) had absconded their responsibilities at the household level leaving everything to the women.

Contribution of each indicator to disempowerment

Figure 3 depicts the absolute contribution of each indicator to disempowerment for men and women in the sample. The overall length of each bar shows the total disempowerment score (1- 3DE), and the different colored bars within show the absolute contribution of each indicator to disempowerment. Overall, the men's bar is longer implying that men had a slightly higher disempowerment score than women. Group membership and membership in influential groups (collective agency), had the highest contribution to disempowerment for both men and women. Other large contributors to disempowerment were respect among household members, visiting important locations, and control over the use of income. Ownership of land and other assets was the least contributor to disempowerment, men performed better than women in this indicator as depicted by the length of the bar. Men also performed slightly better in the self-efficacy indicator compared to women. The similarities and differences between women's and men's disempowerment profiles point to opportunities for interventions to close empowerment gaps by addressing them in program design.

Discussion

Results of the pro-WEAI reveal that men had a slightly higher disempowerment score than women. Women are more empowered than men both within the households and across the study area. The gap in adequacy between women and men is largest for access to and decisions on financial services, attitudes about intimate partner violence (IPV) against women and ability to visit important locations. Men also performed slightly better in the self-efficacy indicator compared to women. Women in this study area are more likely than men to indicate a husband is not justified in hitting his wife. Tackling **IPV** is a huge arena that is widespread but often tied to localized norms and behaviours. Research from across the world has shown that women who **earn and control their own money** tend to have more power in the home and suffer less domestic violence. Other studies show violence can be used as method of maintaining power and control over these resources. To aid in

¹³ Hazel et al., (2019). Development of the project-level Women's Empowerment in Agriculture Index (pro-WEAI).

addressing gender norms there is a need to include programs that work to provide safe spaces, gender trainings, and gender transformative programs with both genders.

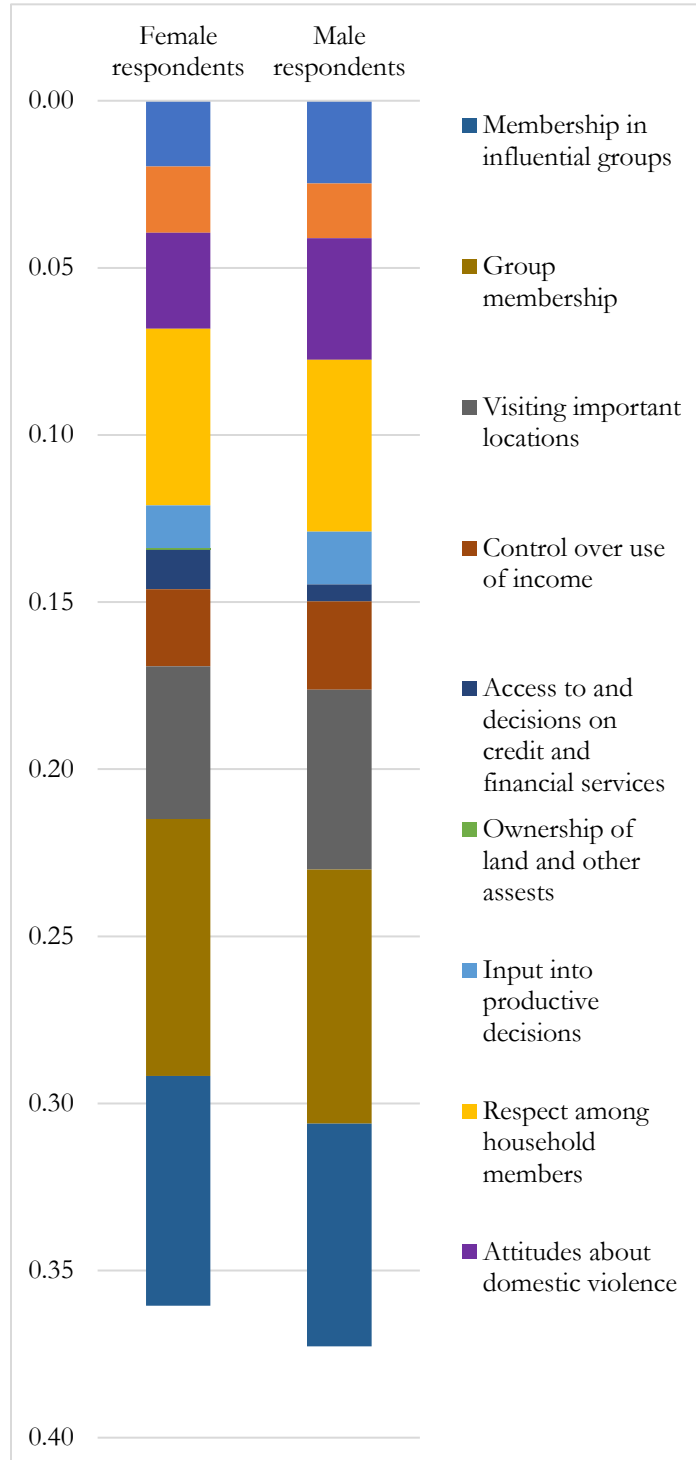


Fig 3: Contribution of each indicator to disempowerment

Men are more empowered in **mobility** indicator. Increased mobility also tends to be a product of other things, such as engagement in the labour market. Women in the area are less involved in labour force which prevent them from realizing their full economic potential. Safety concerns also restrict their physical and economic mobility. This also gives men less time to implement soil and water conservation measures than men. However, due to limited mobility, women are less likely to attend agricultural trainings and access information on appropriate methods for soil management. Even without being involved in labor force, women face competing labor demands that limit their time and ability to implement more time-consuming, labor-intensive agricultural practices. Investments should be made in labor-saving and productivity-enhancing technologies and infrastructure to free women's time for more productive activities.

Most men and women are not members in **influential groups** in the study which denies them important community structures necessary to improve their control over the conditions that determine their livelihoods. There is a need to strengthen rural institutions and organizations. Functioning, inclusive institutions are key to rural transformation.

Overall, **respect** among household members is evident in the study area although women are more likely to respect their spouses compared to men. Women often find intrahousehold harmony as important to them, both for its intrinsic value and because harmonious relations with husbands and in-laws would enable women to do more, including having greater capacity to move freely, attend group meetings, and earn income.

Gender disparity in accessing **land and other productive assets** is almost inexistence in the study area. However, during key informants' interviews and FGDs, we found that women only have access to land but lack control. Land tenure is often less secure for

women than for men with many women not owning the land they grow crops on. Yet, ownership would allow access to credit and encourage investment in capital-intensive soil management practices that have long-term benefits. Advocacy for more equal land tenure should be strengthened.