Introduction: Globally, women contribute to the food-security of their households through growing crops and also ensuring dietary diversity by selecting which foods to prepare depending on availability. However, women’s access to resources compromises their decision-making position in the household regarding agricultural production, and little is known whether this affects their ability to safeguard their household’s food and nutrition security. This study investigated the association between the extent of women’s participation in agriculture decision-making and their households' food-security status.

Methods: A descriptive cross-sectional survey design and a random sample of 135 women from dual-headed farming households in Luwero district were used for this investigation. A section of the Women Empowerment in Agriculture Index (WEAI) tool measured women’s participation in decision-making while the household dietary diversity score (HDDS) and the household food insecurity access (HFIA) scale were used to measure household food-security status. Chi square test determined the association between participation in agriculture decision-making and household food-security.

Results: Influenced by age, access to credit and engagement in community groups/networks, majority (62%) of the women had a moderate decision-making position and only 30% had a high decision-making position in agricultural production. However, the association between participation in agriculture decision-making and household food-security was statistically significant ($X^2 = 15.230; p = 0.004$).
Conclusions: Women should be engaged in agricultural decision-making in order to influence household food-security. More gender mainstreaming and awareness training is important for men to realise the relevance of women’s contributions to agriculture and household food and nutrition security.