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“Filling gaps and removing traps
for sustainable resource management”

Impact of a Combined Nutrition and Agricultural Intervention on Time-Use and Dietary Diversity of Women Smallholder Farmers in Teso Sub-County, Kenya

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Abstract

Women constitute an essential agricultural workforce; they play a crucial role in the food provision of the entire household. Research has shown that interventions aiming to improve nutrition security without addressing gender may have adverse side effects and intensify women's fieldwork. Increased time invested in agricultural activities can unintendedly result in inadequate care and nutrition practices.

In June 2016 and 2017 cross-sectional agriculture-nutrition surveys were conducted in Teso sub-County, Kenya, targeting 421 farm households with children aged below five years. Minimum dietary diversity score for Women (max 10 groups) and child dietary diversity score (CDDS, max 7 groups) were calculated based on 24h-recalls. Time allocation was assessed based on 24h-physical-activity-recalls of the respondents.

Results were compared across three different groups: nutrition education only (NE), combined agricultural and nutrition education (AGNE) and control. Women of all groups had a mean cooking time of around 3 hours. The mean time for feeding children/breastfeeding was lower than 4 minutes. Mean time spent on children's care increased significantly in the combined intervention group (mean = 13.7 min). NE group and control group also increased the time spend in child care (6.4 and 8.3 minutes, respectively). None of the interventions had an influence on the Δ cooking time of mothers. There was a significant difference in Δ farming time between the intervention groups. Changes in Δ farming time were significantly higher in the combined intervention compared to the NE Group. CDDS was not affected by an interaction between participation in the intervention and Δ cooking time of mothers. There is also a statistically significant influence of Δ eating time of mothers on Δ CDDSs in Kenya.

The analysis revealed that the project had a slight influence on the change of time-use suggesting that gender time-use data is decisive when promoting innovative agricultural approaches.

Keywords: Agriculture, dietary diversity, gender, nutrition, time-use