

## INTRODUCTION

- Inequalities in access and control of resources and low participation of women in decision making often undermine productivity of women, who constitute 75 percent of Kenya's agricultural labour force.
- As a result, many agricultural development interventions aim to empower women alongside goals to improve agricultural productivity, food security and nutrition and incomes
- Despite this growing commitment to gender equality and women's empowerment among funders and implementers of agricultural development projects, consistent approaches for measuring women's empowerment in agricultural development projects are lacking.
- Valid and comprehensive measures of gender equality and women's empowerment are essential to monitor progress of whether these projects are achieving their goals and Sustainable Development Goal (SDG) 5 on gender equality and empowerment of all women and girls by 2030.
- Most indices of women's empowerment have been measured and reported at the national level because they rely on administrative or aggregate data, and thus focus on gender equality, rather than women's empowerment.
- This study fills the unaddressed gap by existing metrics, by adapting Women's Empowerment in Agriculture Index (pro-WEAI) to measure women's empowerment in the agricultural sector directly through a focus on women's agency.

### Study objective

- To assess impact of the project activities on household income levels and women's control on use of income in Central Kenya

## METHODOLOGY

### The study site

- The study was conducted in Kinangop sub-County, Nyandarua County in Central Kenya (Figure 1).
- The County is considered the food basket of Kenya because of its high production of potato, cabbages, carrots, peas and milk that are sold in Nairobi and most other towns in Kenya.
- Declining agricultural productivity associated with low adoption of proven agricultural technologies, poor markets and gender inequalities are some of the key challenges facing the County

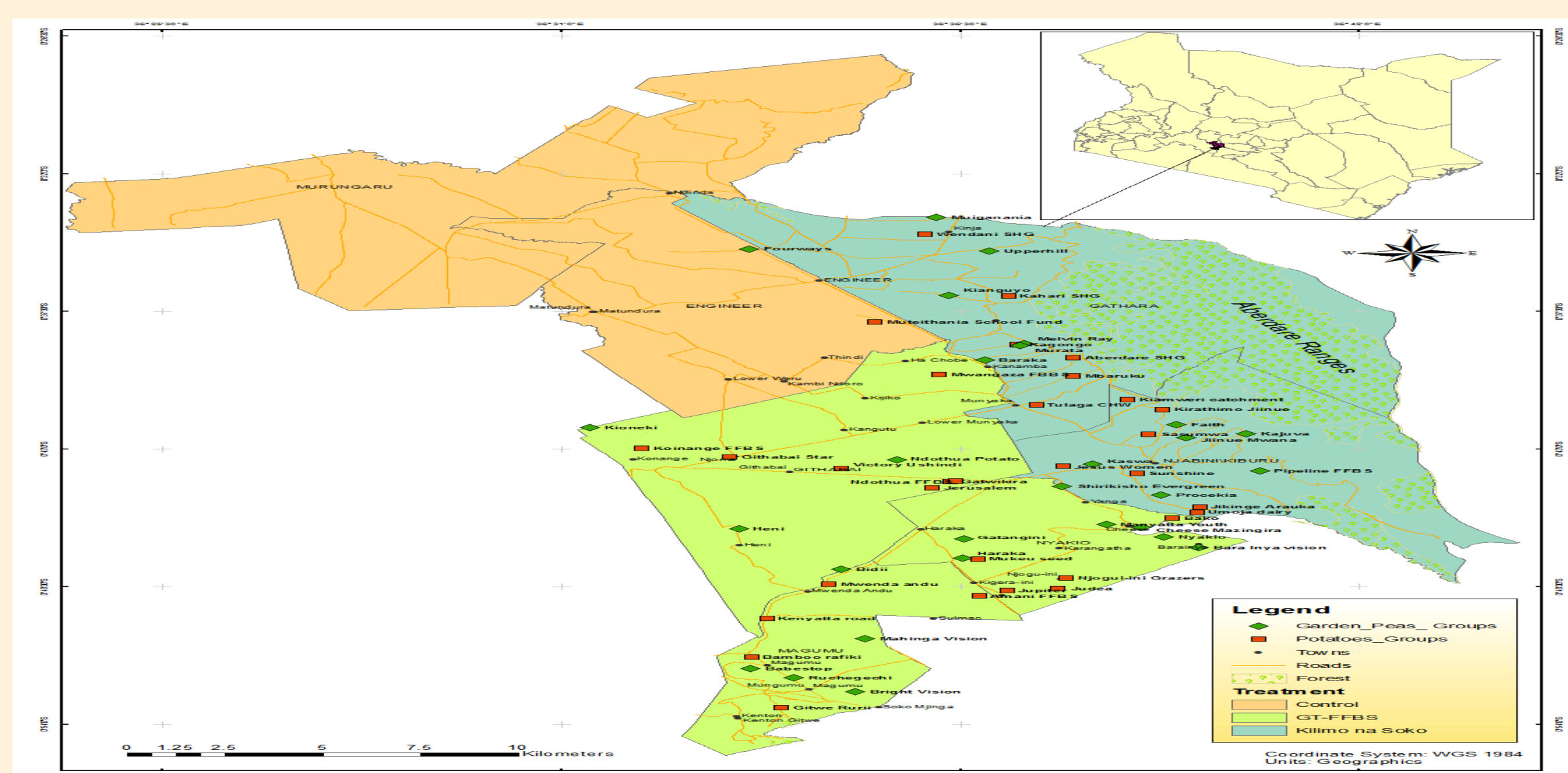


Figure 1: Location of the study area

### Sampling, data collection and analysis

- Randomized Controlled Trial (RCT) design with three treatment arms: CARE's Gender Transformative Farmer Field and Business Schools (GT-FFBS) (demonstration of improved production and marketing of potato and garden peas + nutritional behavior change communication)+gender and women empowerment); Standard gender-neutral Farmer Field School (FFS) (demonstration of improved production and marketing of potato and garden peas) and control (no intervention) was used to test impacts of the two versions of FFS. The treatments were spatially separated.
- Mixed-methods (quantitative and qualitative) were applied to triangulate information, thus yielding greater external validity
- Quantitative data: Household and an adapted pro-WEAI questionnaires were used to gather baseline data from 456 households and 571 primary and secondary male and female household members from dual Households (DHH) (with both male and female adults) and Sole Female-Headed Households (FHH) (with only adult female) before start of the project interventions in June/July 2018
- A midline of a sub-sample of baseline survey composed of 237 households and 322 individuals were surveyed in July 2019., using the same questionnaires
- Quantitative data were matched with baseline data by unique identification numbers and analyzed by descriptive statistics and inferential t-test.
- Qualitative data: Collected through 24 Key Informant Interviews (KII) (14 male and 10 female community members) and 20 Focus Group Discussions (FGDs) ( 9 for women; 7 men; 3 both men and women )using checklists (Plates 1 and 2) and analysed by themes



Plate 1. Focus Group Discussion, Murungaru Ward, July 2019



Plate 2: Household interview at Nyakio Ward, July 2019

## KEY FINDINGS

### Changes in household incomes

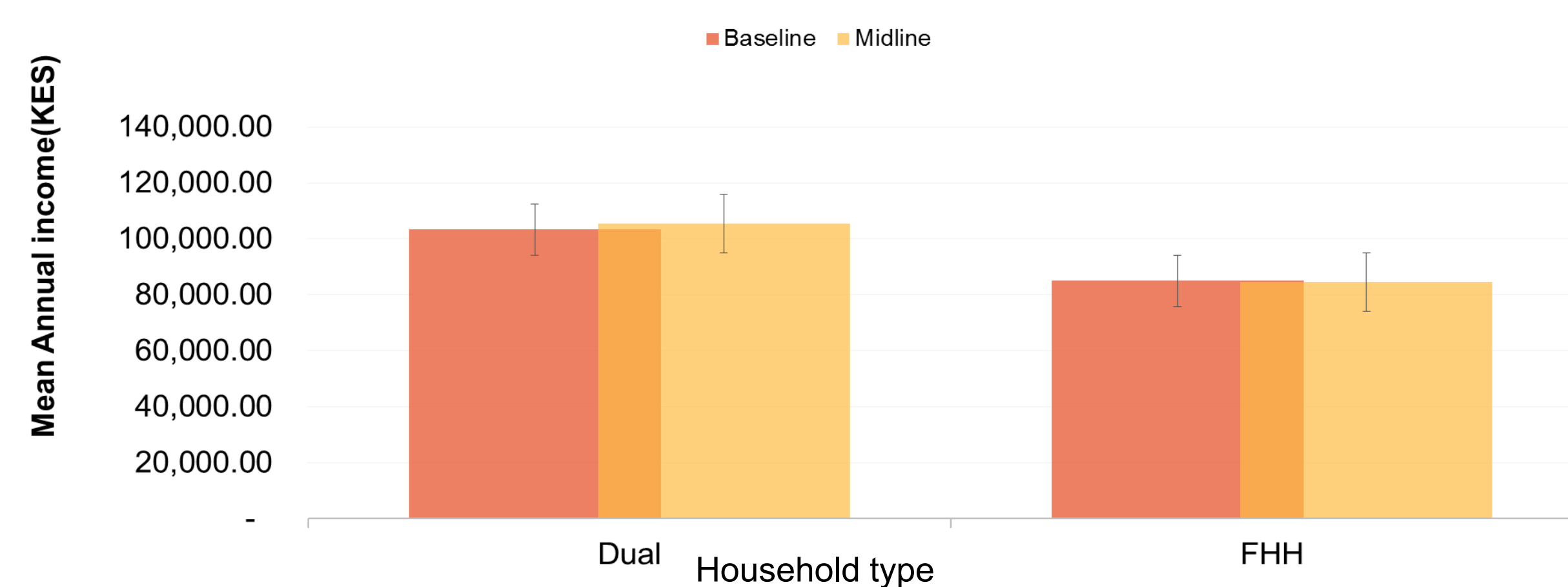
- The GT-FFBS had highest income increase of 8 percent, whilst income from control treatment declined by 5 percent (Table 1). The minimum changes in household incomes, according to KII and FGDs, could be attributed to low productivity and poor markets. Moreover, there was a short time lag between intervention and the midline survey, hence most farmers had not adjusted their farming practices.

Table 1: Changes in household income (Kenya shilling) between baseline and Midline surveys

Treatment	Baseline income	Midline income	percent change (%)
Control	155,353	148,194	-4.61
GT-FFBS	222,663	241,224	8.34
FFS	132,600	134,716	1.60

### Incomes levels (KES) received by male and Female members

Dual households received slightly higher income than FHH (Figure 2). However, the incomes were not significantly different ( $p > 0.05$ ) (Figure 2).



Note: Error bars represent 95% Confidence Interval

Figure 2: Mean annual income (KES) in Dual and FHH households

- The proportion of primary female household members who had control over use of income was significantly higher in CARE's GT-FFBS than in control treatment at midline survey, unlike in the baseline survey ( $P < 0.05$ ) (Figure 3).
- The results contrast the findings from testimonies during KII and FGDs, where women clearly pointed out that most of them have no control over income, especially from crop sales. This could be due to variance of indicators used to compute this variables compared to ones used by farmers.

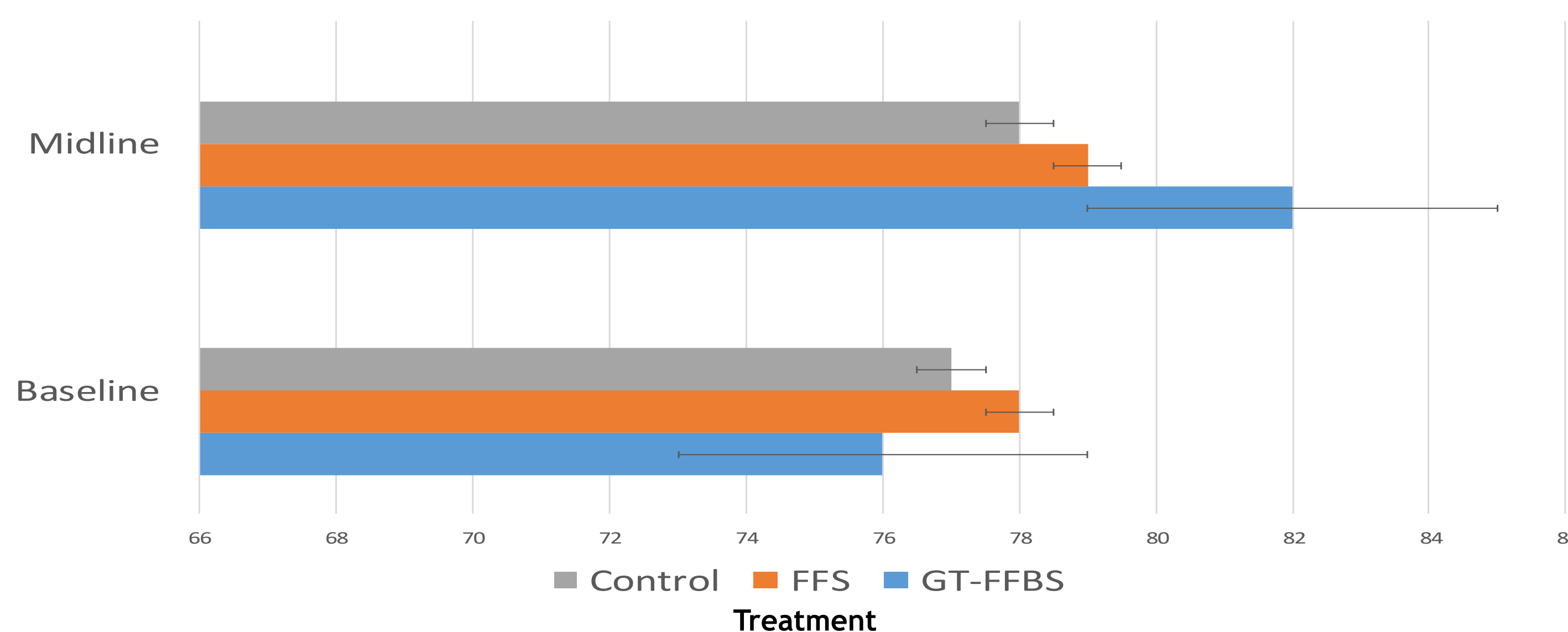


Figure 3: Percent women from dual households with control over use of income

## MOVING FORWARD

- Anecdotal evidence suggests a minimal change in household income. Given the high dependency on agriculture, especially garden pea and Irish potato, for income and subsistence, the yields of the two crops has not yet improved
- The proportion of women from dual households with control over use of income in CARE's GT-FFBS is significantly higher than in control treatment
- Further analyses will be conducted after end line survey in 2020 to provide more evidence to confirm or reject these preliminary findings

### ACKNOWLEDGEMENTS

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