Kenya Global Labour Programme Impact Evaluation

Baseline Study Report

Implemented by:

Sightsavers

ipa
INNOVATIONS FOR
POVERTY ACTION

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Executive Summary

This report describes the baseline survey results for the impact evaluation of the USAID-funded Global Labour programme (GLP) in Kenya, which aims to demonstrate that a set of interventions along value chains leads to improved levels of employment among women and men, particularly those with disabilities, as well as improvements in the protection of their labor rights.

The Programme

Led by Sightsavers, a consortium of local and international organizations secured funding from USAID in 2021 to implement a 5-year programme that supports smallholder farmers in accessing high quality agricultural inputs (subsidized, higher yield seeds, fertilizers, crop protection products), extension advice and higher value markets. The programme also links farmers to corporate supply chains, business finance and insurance products which are expected to increase farming household resilience. The programme focuses on disability and gender, recognizing and responding to the barriers that exclude farmers with disabilities, from participating in labor markets and the failure to protect their labor rights. The programme builds on an existing value chain platform—the East Africa Breweries Limited (EABL) sorghum value chain—and develops the capacity of farmers in the community to establish sustainable agency businesses and expand the reach of services closer to the farmer base. This programme is being implemented in Western Kenya, and has the potential to be scaled up to improve levels of participation in labour markets, particularly amongst women and men with disabilities, and demonstrate how employment rights can be strengthened for farmers throughout the country.

The Impact Evaluation

Sightsavers and Innovations for Poverty Action (IPA) are conducting a non-randomized cluster trial to evaluate the impact of the programme in Migori, Homa Bay, Kisumu, Siaya and Busia counties of Western Kenya. In this evaluation, selected sub-counties are purposively assigned to either receive the programmatic interventions or not. Data are collected from randomly selected farmers in households within each arm who consent to study participation and meet study eligibility criteria.

The Sample

Fourteen sub-counties are participating in the study, with half receiving the intervention (the intervention arm) and half not receiving it (the control arm). A representative probability sample of 4,459 sorghum farmers was selected for the study (2,236 in the intervention arm and 2,223 in the control arm).

Baseline Results

The primary purpose of the baseline data collection was to measure the starting point for all participants in the sample and check whether the intervention and control conditions are balanced before the start of the intervention. Outcomes were generally balanced between control and intervention areas – the main difference was in terms of experienced and perceived support towards people with disabilities. Given that sub-counties were not randomly assigned, it is not surprising that some of the key socio-demographic characteristics of the sample at baseline were not balanced between the intervention and control areas. These differences will need to be accounted for in the endline statistical analyses. In addition, nested in-depth case studies of farmers will be conducted to provide qualitative data that could facilitate the contextualized interpretation of trial findings.

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1.0 Introduction

The purpose of this evaluation is to examine whether and how the Global Labour programme (GLP) (1) implemented by a Sightsavers-led consortium results in more smallholder farmers with disabilities participating in labour markets and being more confident about exercising their labour rights as farmers. The study is being carried out in Kenya, which has a recent history of agricultural value chain policy interventions, such as increasing market participation and linkages between rural producers and urban consumers, value addition, and enhancing access to credit for small scale farmers who are most vulnerable, including those with disabilities. These interventions are largely based on a recognition that smallholder farmers are responsible for the production of the bulk of food consumed in the country – and the myriad of new opportunities for maximizing private sector investments in agriculture-based value chains.

Agriculture is the backbone of the Kenyan economy, employing over 54% of the population and 80% of those in rural areas. It contributes to over 25% of annual gross domestic product (GDP) and accounts for 65% of exports (2, 3). Data on disability in the agriculture sector in Kenya is scarce. However, prevalence of disability in rural areas, where the majority of agricultural workers reside, is estimated to be twice as high as in urban locations (2.6% vs 1.4%) (14).

Agriculture-based value chains have the potential to address some of the barriers faced by persons with disabilities in participating in labour markets (4). Available evidence shows that people with disabilities can participate in agriculture by contributing their labour (i.e. carrying out their household farming activities) or through decision making (i.e. making decisions about what to cultivate, how to cultivate it, when to sell, and how to use income generated) (5). However, they face a combination of systematic, attitudinal, or environmental barriers that limit their participation in agricultural value chains and often, they have little or no control over production and marketing decisions. Attitudinal factors (such as misconceptions that people with disabilities cannot engage in farming activities, distrust by financial institutions that exclude them from accessing credit facilities, and self-exclusion from agriculture due to self-stigma and low self-esteem) have been identified as some of the factors that limit their participation in agriculture (6, 7). In addition, environmental factors (such as lack of adapted farming tools and techniques, inaccessible training, and inaccessible infrastructure) and institutional barriers (such as discriminatory policies, and lack of access to land) may also limit their participation in agricultural value chains (8, 9).

This baseline report begins with an introduction and a description of the programme under evaluation and our evaluation study design. We then discuss data collection activities, including sampling methods. This is followed by tables that present the descriptive statistics for the main study outcomes. Finally, the report describes methodological limitations and how we have addressed the risks they posed.

1.1 Background information

This impact evaluation examines the effectiveness of a programme that scales up a commercial approach to smallholder sorghum farmers accessing agricultural services within a sustainable farmers hub-spoke model (10, 11).

In Kenya, the approach had previously been piloted by Syngenta Foundation East Africa in Nyandarua, Nakuru, Laikipia, and Homa Bay Counties and found to be viable (11). Hubs and spokes offer a catalog of fee-based and no-fee-based services, including access to higher quality inputs (seeds, fertilizers, crop protection products), mechanization, and financial services as well as no-cost agricultural advisory services and a demonstration plot. This model recognizes that smallholder farmers will tend to adopt more modern growing technologies and techniques only when it does not risk the production they currently achieve and need to sustain their families. The programme, funded by the United States Agency for International Development (USAID), focuses on disability and gender, recognizing and responding to the barriers that exclude farmers with disabilities, from participating in labor markets and the failure to protect their labor rights. The policy context within which the programme is being implemented is very favorable because it leverages the government of Kenya Vision 2030 and its third medium term plan 2018-2022 (12, 13) – both of which identify agriculture as one of the key drivers of economic growth and development. In addition, the programme has been developed and is being implemented in collaboration with the United Disabled Persons of Kenya (UDPK) and a range of other local and international organizations recognized globally for their expertise in labor rights, gender, and disability inclusion.

The GLP programme builds on an existing value chain platform—the East Africa Breweries Limited (EABL) sorghum value chain. EABL has an extensive value chain that contracts nearly 47,000 farmers, predominantly in Western Kenya, through the East Africa Malting Limited (EAML). Contracted sorghum farmers sell their product to aggregators, and then the malting mill for processing. Malted sorghum is then sent for brewing and bottling before the finished product is sent to distributions, and finally consumers. East Africa Malting Limited (EAML) also provides value-added services through the hub-spoke set up at no cost, including additional sorghum specific advice, subsidized, higher yield seeds as well as post-harvest support in drying and threshing the crop.

1.1.1 Hubs and spokes

A maximum of 3 hubs with corresponding spokes will be set up in each of years one, two and three of the programme. Each hub-spoke set up will have an agency agreement with Syngenta Foundation East Africa (SFEA) and an aggregation agreement with East Africa Malting Limited (EAML). Hubs will be managed by a hub entrepreneur (also referred to as a network manager) who will be supported through business development training, business registration, inputs licensing, as well as training and support by SFEA. Farmers will sign a sorghum aggregation agreement with the hub on behalf of EAML. The EAML contract will

guarantee the farmer a fixed price to kg of sorghum crop, with the hub receiving an aggregation premium as part of its business model.

A hub is expected to become commercially viable when approximately 100-150 farmers within a radius of 5–7-kilometre are accessing its services. Once hubs start to have a wider reach and larger client base, they will expand by contracting sub-agents at the ward levels to deliver more localized services to remote farmers and potentially forming their own satellite hubs (spokes). A hub and spoke model approach will therefore be adopted in the creation of hubs as illustrated in Figure 1 below.

Figure 1: Hub and spoke model
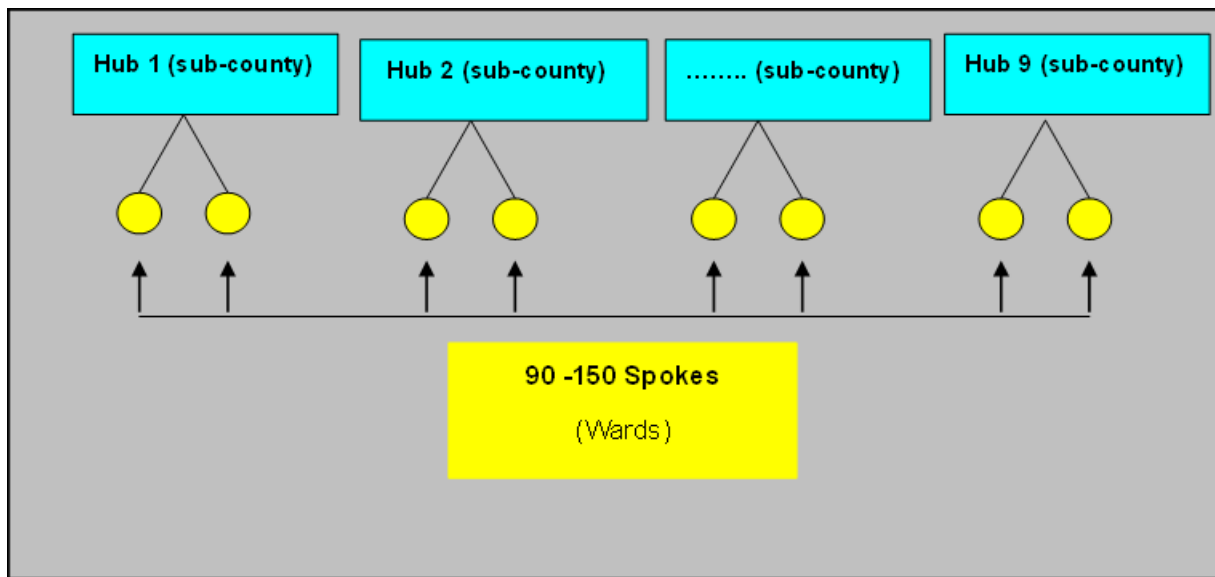
A publicity campaign will continuously be conducted in intervention communities to mobilize and encourage farmers to sign up to the hubs and spokes. Publicity activities will include orientation meetings with local leaders and community groups, door-to-door visits by project personnel, and the distribution of posters and pamphlets. Farmers with disabilities will be mobilized through local organizations of people with disabilities (OPDs), formed into farmers groups registered with local government (as a prerequisite to group bank account opening), and linked to the hub. Farmers without disabilities will be attracted through word-of-mouth.

1.2 General objective

The overall objective of the impact evaluation is to determine whether the programmatic interventions described above result in more farmers with disabilities participating in labour markets and being more confident about exercising their labour rights.

1.2.1 Specific objectives

To compare the following outcomes among sorghum farmers living in intervention areas and those in control areas at baseline and endline:

1. proportion of sorghum farmers with a contract

2. employment status

3. confidence of sorghum farmers, with regards to rights

4. disability related stigma

5. proximity and geographic distribution of agricultural extension services around individual sorghum farmers

1.2.2 Programme and research questions

The key programme and research questions are:

1. Do the proposed interventions result in more men and women, including those with disabilities, participating in labor markets and being more confident about exercising their labor rights?

    –   What is the effect of the intervention on the proportion of sorghum farmers with an EABL contract of intent?

    –   What is the effect of the intervention on the confidence of sorghum farmers, with regards to rights?

2. Who does and does not benefit from the interventions and why?

3. How do interventions affect the employment prospects and practices of sorghum farmers in this setting?

4. What are the levels of disability related stigma among study participants?

5. What is the proximity and geographic distribution of agricultural extension services around individual sorghum farmers

2.0 Methods

2.1 Study design and population

This report presents the baseline pre-intervention data from a non-randomized cluster trial of Sorghum farmers aged 18 years and above who reside within the GLP programme area. The study evaluates the effect of living within the catchment area of a hub or a spoke i.e., being exposed to the hub-spoke interventions described elsewhere in this report, on study outcomes. The trial involves 14 sub-counties across 5 counties in Western Kenya being purposively allocated to the intervention or control arms (7 sub-counties each). Study participants include randomly selected farmers within each arm who consent to study participation and meet study eligibility criteria.

Figure 2: Overview of study design

Months	Activity	Cohort 1	Cohort 2	Cohort 3	Control
0 - 3	Identification	Enrollment and baseline	Enrollment and baseline	Enrollment and baseline	Enrollment and baseline
4	Intervention with Cohort 1	Intervention	Pre-intervention	Pre-intervention	No intervention
16	Follow-up	Follow-up			
16	Intervention with Cohort 2		Intervention		
28	Follow-up	Follow-up	Follow-up		
28	Intervention with Cohort 3			Intervention	
40	Follow-up	Follow-up	Follow-up	Follow-up	
50	Endline data	Assessment of Final Study Outcome Measures			

Programmatic financing dictates that there will be a maximum of 3 hubs set up in each of years one, two, and three of the programme. We will therefore enroll 3 cohorts of farmers as shown in Figure 2. The cohorts will be exposed to the intervention over staggered 12-month intervals. Thus, the longest exposure, for those living in the areas, where the hubs will be established in the first year will be 46 months and the shortest period of exposure will be 22 months. We collected baseline data at the beginning of the intervention (months 0-3), and end-line data will be collected at the end (month 50). Additional follow up data will be collected from participants at months 16, 28 and 40.

2.1.1 Inclusion criteria

The inclusion criteria were:

- Live within the borders of selected sub-counties in Western Kenya

- Be aged 18 and over

- Willing and able to provide informed consent for study participation

- Currently farming sorghum or has access to land for farming and willing to consider sorghum farming for sale.

2.1.2 Exclusion criteria

The following people were excluded from the study:

- Refused to consent

- Individuals who have known intellectual disorders that would preclude the provision of informed consent

2.2 Sample size and strategy

The sample for the study covered the population residing in households in the selected 14 sub-counties in Western Kenya. A representative probability sample of 4,459 sorghum farmers was selected for the study (2,236 in the intervention arm and 2,223 in the control arm). Two-stage cluster sampling was conducted to obtain representative samples proportional to size of each of the sub-locations in the 14 sub-counties. The first stage involved selecting sample points from a list of sub-locations covered in the 2019 Population and Housing Census (14). The second stage of selection involved the systematic sampling of households from the census list of households in each sub-location. Within households, all adults who met the study eligibility criteria were offered participation in the study. A study staff visited the sub-location before the data collection team arrived and met the community leader or their representative, introduced the study purpose, confirmed number of households against the census list, asked for written information such as a map and a current list of households. The same set of households surveyed during the baseline data collection period will be surveyed during the endline data collection period.

Eligible individuals within the household who declined participation were recorded as "refused to participate." Details of absent participants were taken, and attempts made to contact them. A careful differentiation was made between ineligible, absent and refusal to participate.

The location of sampled clusters is mapped out in Figure 3.

Figure 3: Map of sampled clusters in control and intervention areas.
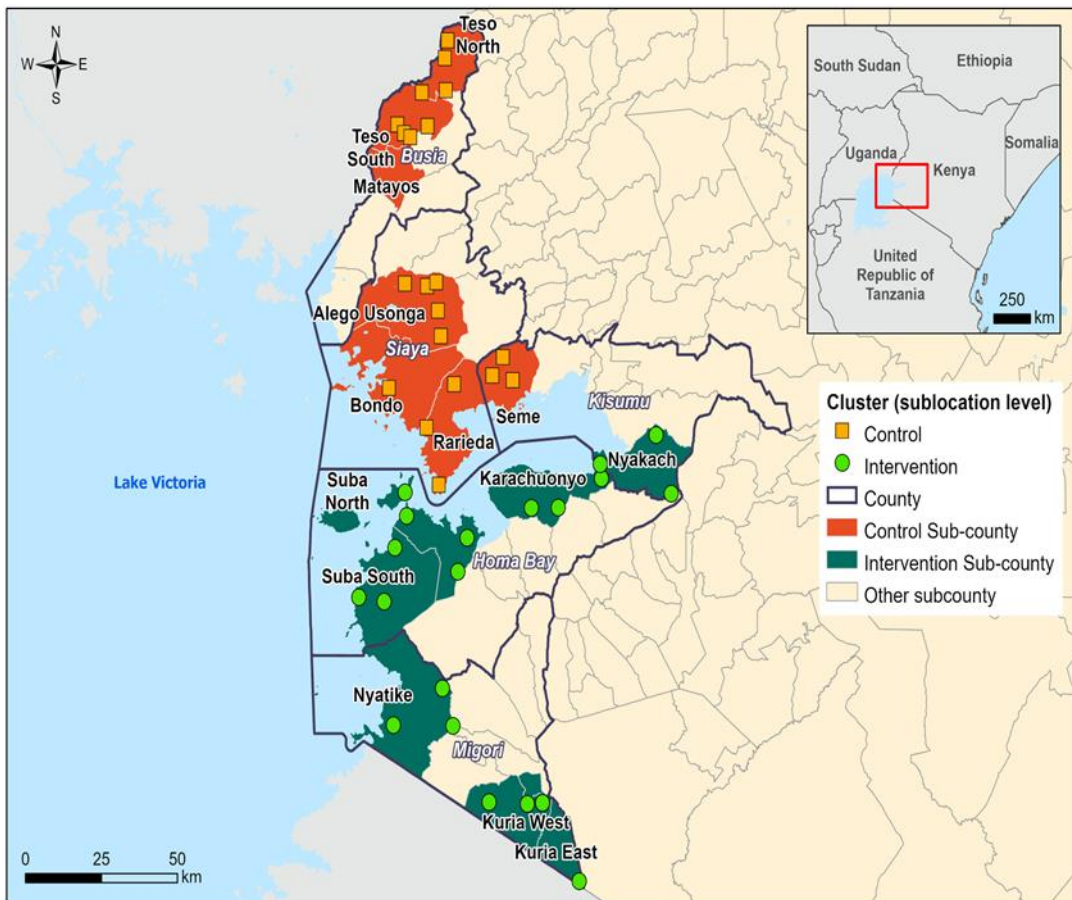
2.3 Study Questionnaires

Two broad questionnaires were used to collect data, a household questionnaire, and several individual questionnaires. These tools, structured into modules, were either adapted from existing instruments or investigator-developed in instances where no existing measures were available. These questionnaires were translated from English into three local languages – Swahili, Luo, and Luhya. The questionnaires were further refined after the pretest and training of the field staff.

The main purpose of the household questionnaire was to identify men and women who were eligible for the individual modules. The household questionnaire also collected information on household wealth characteristics, using 13 questions from the Kenya Equity Tool (15).

The individual modules were used to collect information from all study participants and covered the following topics:

- Background characteristics (e.g., education, occupation, religion, marital status, and others that are expected to help the research team contextualize the sample and better understand the endline results)

- Exposure to and involvement with hubs and spokes – to gauge participants' level of awareness of the intervention

- Disability, assessed using the Washington Group/International Labor Organization Labor Force Survey Disability Module (LFS-DM) (16)

- Experiences of disability-related stigma and discrimination, assessed using a modified version of the EMIC Community Stigma Scale (17)

- Participation in labour markets, assessed using questions from the ILO Labour Force Survey (LFS) adapted for countries with a high proportion of small-scale agriculture (18)

- Confidence in exercising labour rights, assessed using a modified version of the general self-efficacy (GSE) scale (19)

All the tools are available as a **supplemental file**

Definition of variables

Disability was defined as a response of "A lot of difficulty" or "Cannot do at all" to at least one of the 6 questions on functional difficulty domains from the Washington Group / ILO Labor Force Survey Disability Module (LFS-DM), or a response of "Daily" to the questions on anxiety or depression. Similarly, the presence of a functional difficulty for a specific domain was defined as a response of "A lot of difficulty" or "Cannot do at all" to the relevant question. The presence of anxiety or depression was defined as a response of "Daily" to the relevant question.

Employment outcomes were derived from the ILO LFS module based on the ILO guidelines[1].

Those employed are defined by the ILO guidelines as:

> "persons of working age who, during a short reference period (seven days or one week), were engaged in any activity to produce goods or provide services in exchange for pay or to generate profit."

Status in employment was defined as per the ILO guidelines, using the following categories based on type of authority (ICSE-18-A): independent workers without employees, employers, contributing family workers, employees, and dependent contractors. This classification is based on the respondent's self-declared status combined with their responses to follow-up questions such as the decision-making, pay, if they have employees etc.

The nature of the main job (informal or formal) was used to identify people in formal or informal employment. As per the ILO guidelines, all contributing family workers were classified as having an informal job. Employers and independent workers without employees were classified as having an informal job if they worked in and informal sector unit. Dependent contractors were classified as informally employed if they had self-declared as "employees", or if they had self-declared as "self-employed" and were working in an informal unit. Finally, employees were classified as informally employed depending on their responses on paid annual and sick leave and employer's social security contribution.

People in time-related underemployment were defined as those who were employed, working less than 40 hours per week, and wanting to and available to work more hours.

A score of confidence in exercising labour rights was constructed, based on the tool presented in the **supplemental file**, by assigning values to each response: 1="Not at all true", 2="Hardly true", 3="Moderately true", 4="Exactly true". The responses to each question were summed up to create a confidence score out of 48, with a higher score indicating higher levels of confidence.

To assess stigma and discrimination, the participants were asked questions on aspects such as physical, verbal abuse as well as emotional or financial support towards people with disabilities.

Among those without disabilities, we analysed responses on perceived stigma/discrimination or support towards people with disabilities within the community. Among those with disabilities, we analysed responses on their own experience of stigma/discrimination or support.

Specifically, at this stage, we analysed the outcomes in a binary fashion based on respondents answering "yes" to at least one question pertaining to each of the areas examined. Among those without disabilities, the outcomes were "any perceived stigma/discrimination" and "any perceived support". Among those with disabilities, the outcomes were "any experienced stigma/discrimination" and "any experienced support"

2.4 Data collection

All baseline data was collected face to face in the field using keyless, touch-screen, tablets running SurveyCTO software. Innovations for Poverty Action (IPA) research assistants carried out data collection for the survey. The IPA field office in Busia coordinated and supervised fieldwork activities, assisted by occasional visits by the study Principal Investigator from Sightsavers. Data collection took place over a 7-week period, from 26th January 2022 to 18th March 2022. On the scheduled visit to the households, the survey team introduced the study, obtained consents, and administered the questionnaires.

Prior to start of fieldwork, IPA arranged for targeted activities designed to promote awareness of the survey and encourage participation. Advocacy and mobilization activities continued throughout the survey period to encourage participation.

2.5 Data analysis

The primary purpose of the baseline data collection was to measure the starting point for everyone in the sample and gauge the balance (or lack of it) of the intervention and control conditions before the start of the interventions.

Analyses were conducted using R v4.2.1, Stata15 and Stata16. The proportions of the responses "Refuse to answer" and "Don't know" were tabulated and examined (data not presented here), they were then recoded to missing data. All analyses were conducted on available (i.e., non-missing) data, no missing data imputation was performed. All comparisons and models are adjusted for clustering within the sublocations, using the R package survey (v4.1.1).

Results were tabulated using descriptive statistics: N (%) for categorical variables and median (IQR) for continuous variables. When the proportion of respondents giving an "other" response to a question was higher than 5%, this category was recoded using the free-text information recorded by the participants.

All statistical analyses were conducted using a significance level of 5%.

Baseline characteristics were compared between intervention and control groups using a Wald test for categorical data, and a Wilcoxon rank-test for continuous data, the p-value from these tests was presented in the tables. When the p-value was statistically significant, they were denoted in bold.

Patterns of association between the outcomes of interest and key socio-demographic variables, as well as the intervention group, were examined using univariate regression models: logistic regression for binary outcomes, multinomial regression for categorical outcomes and linear regression for continuous outcomes. Models including only age and sex were conducted separately while for all other variables explored, models were adjusted for age and sex due to the potential confounding nature of these variables. Estimates obtained from logistic and multinomial models were exponentiated to obtain Odds-Ratios and

associated 95% confidence intervals which are presented in this report. Results of the linear regression models were presented as estimates and associated 95% confidence intervals.

2.6 Ethical considerations

The research protocol was reviewed and approved by two human subjects' regulatory committees in Kenya: The Institutional Ethics Review Committee of Strathmore University (SU-IERC) and the National Commission for Science, Technology, and Innovation (NACOSTI).

3.0 Results

3.1 Study sample and demographic characteristics

The final dataset comprised 4,459 participants from 40 sublocations (clusters), among the 4,491 sampled (response rate of 99.3%).

More women (61.9%) than men were sampled, with a significantly higher proportion in control (66.1%) than intervention (57.6%) areas (Table 1). Participants' age ranged from 18 to 92 years, and the median age was 44 years. The vast majority of the sample had attended school (91.9%). The highest level of completed education for most participants was some of or all primary levels (71.1%). Education levels were higher for participants from intervention than control areas, with higher proportion of participants in the intervention group having completed primary, incomplete or completed secondary and above secondary education.

Regarding religion, most participants were protestant (30.6%), from evangelical churches (28.8%), catholic (21.4%) or from African instituted churches (18.0%). The majority of participants were married or cohabiting to one person (77.9%), while a substantial proportion were widowed (19.2%).

Table 1: Personal characteristics

		Control	Intervention	Overall	P
Sex	Women	1469 (66.1%)	1289 (57.6%)	2758 (61.9%)	<0.01
	Men	754 (33.9%)	947 (42.4%)	1701 (38.1%)	
Age	Median (IQR)	45 (34, 59)	42 (32, 57)	44 (33; 58)	0.07
	Range	45 (34, 59)	42 (32, 57)	44 (33; 58)	0.07
Ever attended school	Yes	2043 (91.9%)	2068 (92.5%)	4111 (92.2%)	0.72
	No	180 (8.1%)	168 (7.5%)	348 (7.8%)	
Education[2]	Some primary	929 (45.5%)	790 (38.2%)	1719 (41.8%)	<0.01
	Completed primary	565 (27.7%)	637 (30.8%)	1202 (29.3%)	
	Some secondary	257 (12.6%)	231 (11.2%)	488 (11.9%)	
	Completed secondary	188 (9.2%)	262 (12.7%)	450 (11.0%)	

		Control	Intervention	Overall	P
	More than secondary	103 (5.0%)	147 (7.1%)	250 (6.1%)	
Religion	No religion	5 (0.2%)	14 (0.6%)	19 (0.4%)	0.21
	Catholic	594 (26.7%)	362 (16.2%)	956 (21.4%)	
	Protestant	571 (25.7%)	795 (35.6%)	1366 (30.6%)	
	Evangelical churches	652 (29.3%)	631 (28.2%)	1283 (28.8%)	
	African instituted churches	384 (17.3%)	420 (18.8%)	804 (18.0%)	
	Other	0 (0.0%)	1 (0.0%)	1 (0.0%)	
Marital status	Single	76 (3.4%)	53 (2.4%)	129 (2.9%)	0.30
	Married/cohabiting	1741 (78.3%)	1734 (77.5%)	3475 (77.9%)	
	Widowed	406 (18.3%)	449 (20.1%)	855 (19.2%)	

The median number of family members living with the respondent was 5, this number was slightly higher in intervention than control areas (median 5 vs 4) (Table 2). Overall, 67.3% of the respondents were the head of household, this proportion was significantly higher in intervention (70.3%) compared to control areas (64.2%). Among those who weren't heads of household, 94.4% were a spouse of the head of household.

With regards to relative wealth, survey participants were broadly similar to the national population in Kenya with 42.7% being in the two poorest quintiles (expected percentage is similar to the national population is 40%). Participants in the intervention areas were slightly poorer than in the control areas with 44.3% being in the two poorest quintiles. Note that the KET used in this study was quite old as it was based on the 2014 DHS, therefore the information obtained on relative wealth might be slightly out of date.

Table 2: Household characteristics

		Control	Intervention	Overall	P
Household size	**Median (IQR)**	4 (3, 6)	5 (3,6)	5 (3,6)	0.03
Household head	No	795 (35.8%)	662 (29.6%)	1457 (32.7%)	0.03
	Yes	1428 (64.2%)	1573 (70.3%)	3001 (67.3%)	
Relationship to household head	Spouse	754 (94.8%)	621 (93.8%)	1375 (94.4%)	0.28
	Parent	17 (2.1%)	21 (3.2%)	38 (2.6%)	
	other	24 (3.0%)	20 (3.0%)	44 (3.0%)	
Wealth quintile	Poorest (Q1-Q2)	916 (41.2%)	987 (44.2%)	1903 (42.7%)	0.59
	Wealthier (Q3-Q5)	1305 (58.8%)	1248 (55.8%)	2553 (57.3%)	

In the study sample, 51.7% of the participants were currently farming sorghum (50.3% in the control areas and 53.2% in the intervention areas), and the vast majority (99.8%) had access to land for farming sorghum (99.8% in control and 99.7% in intervention areas).

For 63% of participants, the main source of income was farming, and around a fifth of respondents (19%) reported trade as their main source of income (Table 3).

A fifth of the participants reported being members of informal or formal farmers' groups, this proportion was higher in control (25.6%) than intervention areas (14.5%). The benefits from being members most frequently cited by the participants were getting seeds or fertilizers at a reduced or no fee (57.2%), and learning new farming practices from each other (43.6%). A substantial proportion of participants (34.8%) also cited other benefits that were not options in the questionnaire. The responses were varied but financial benefits were often mentioned: flexible payments, paying in instalments, getting farming inputs, seeds or fertilizers on loan, hire or credit, obtaining loans. Being able to help one another was also mentioned.

Table 3: Main source of income and membership to farmers group

		Control	Intervention	Overall	P
Main source of income	Farming/fishing	1452 (65.3%)	1358 (60.8%)	2810 (63.0%)	0.91
	Trade	383 (17.2%)	465 (20.8%)	848 (19.0%)	
	Wages	158(7.1%)	162 (7.2%)	320 (7.2%)	
	Remittances[3]	109 (4.9%)	117 (5.2%)	226 (5.1%)	
	None	29 (1.3%)	25 (1.1%)	54 (1.2%)	
	Other	92 (4.1%)	108 (4.8%)	200 (4.5%)	
Member of a farmers group	Yes	568 (25.6%)	325 (14.5%)	893 (20.0%)	<0.01
	No	1655 (74.4%)	1911 (85.5%)	3566 (80.0%)	
If yes (N=893), benefits from being a member[4]	Getting seeds/fertilisers at reduced or no fee	329 (57.9%)	182 (56.0%)	511 (57.2%)	
	To learn new farming practices from each other	228 (40.1%)	161 (49.5%)	389 (43.6%)	
	Other	214 (37.7%)	97 (29.8%)	311 (34.8%)	
	To get better prices for their produce	55 (9.7%)	58 (17.8%)	113 (12.7%)	
	Access advisory services by the government	24 (4.2%)	22 (6.8%)	46 (5.2%)	
	Protection from exploitative traders	20 (3.5%)	18 (5.5%)	38 (4.3%)	
	To have friends	31 (5.5%)	9 (2.8%)	40 (4.5%)	
	No Benefit	12 (2.1%)	9 (2.8%)	21 (2.4%)	

3.2 Engagement with farmers hubs

Only 2.3% (N=104) of the participants had ever heard of farmers hubs established by Syngenta in collaboration with East Africa Breweries Limited and Sightsavers, with no significant difference between control and intervention areas. Among these, only 22 respondents had actually been to such a hub.

Close to half (N=2139; 48%) of the respondents had already seen a demonstration crop or farm, there was no significant difference between control and intervention areas.

As shown in Table 4, most respondents (59.9%) had bought their seeds in store for planting their last crop, a substantial proportion had saved the seeds themselves (18.9%), while others got them from the market (8.9%) or from the One Acre Fund (6.5%). It is interesting to note that these sources varied significantly between control and intervention areas. For example, a significantly higher proportion of respondents bought their seeds in store or in the market in intervention areas (74.9% vs 63.9%) whereas a significantly higher proportion of those in the control areas got their seeds from One Acre Fund (10.9% vs 2.2%).

For the majority of the sample, the last crop was Maize (83.2%), while it was sorghum for 11.5%. It is interesting to note that the proportion of those whose last crop was sorghum was higher in intervention (15.8%) than control (7.1%) areas, although the difference was not statistically significant.

Table 4: Respondents' sources for farming inputs and practices

		Control	Intervention	Overall	P
Provenance of seeds for last crop	Bought in store[5]	1283 (57.8%)	1416 (63.3%)	2699 (60.6%)	**<0.01**
	Saved themselves	437 (19.7%)	406 (18.2%)	843 (18.9%)	
	Market[5]	135 (6.1%)	260 (11.6%)	395 (8.9%)	
	One-Acre Fund[5]	242 (10.9%)	50 (2.2%)	290 (6.6%)	
	Bought at farmers hub	10 (0.5%)	9 (0.4%)	19 (0.4%)	
	Given by family/ friend/ neighbour	53 (2.4%)	67 (3.0%)	120 (2.7%)	
	They don't have seed	4 (0.2%)	5 (0.2%)	9 (0.2%)	
	Farmers group[5]	14 (0.6%)	6 (0.3%)	20 (0.4%)	
	Other	40 (1.8%)	17 (0.8%)	57 (1.3%)	
Type of last crop[6]	Maize	1820 (87.4%)	1708 (79.2%)	3528 (83.2%)	0.33
	Sorghum	147 (7.1%)	341 (15.8%)	488 (11.5%)	
	Beans/ground nuts/indigenous vegetables/kales (sukuma)/millet/soya bean	67 (3.2%)	65 (3.0%)	132 (3.1%)	
	Other	48 (2.3%)	43 (2.0%)	91 (2.1%)	
Source of information about farming	Farmers hub	11 (0.5%)	5 (0.2%)	16 (0.4%)	
	Media	536 (24.2%)	711 (31.9%)	1247 (28.0%)	

		Control	Intervention	Overall	P
innovations, like mechanization	Family/friend/neighbour	342 (15.4%)	365 (16.4%)	707 (15.9%)	
	They don't get this information	992 (44.7%)	910 (40.8%)	1902 (42.8%)	
	Seminars[7]	992 (44.7%)	910 (40.8%)	1902 (42.8%)	
	Chief meetings/barazas[7]	33(1.5%)	34 (1.5%)	67 (1.5%)	
	Farmers groups[7]	42 (1.9%)	26 (1.2%)	68 (1.5%)	
	One-acre fund[7]	187 (8.4%)	62 (2.8%)	249 (5.6%)	
	Other	67 (3.0%)	93 (4.2%)	160 (3.6%)	
Source of advice about farming	Farmers hub	12 (0.5%)	3 (0.1%)	15 (0.3%)	
	Media	447 (20.2%)	599 (26.8%)	1046 (23.5%)	
	Family/ friend/ neighbour	554 (25.0%)	585 (26.2%)	1139 (25.6%)	
	I don't get this information	634 (28.6%)	771 (34.5%)	1405 (31.6%)	
	Seminars[7]	4 (0.2%)	25 (1.1%)	29 (0.7%)	
	Chief meetings/barazas[7]	51 (2.3%)	30 (1.3%)	81 (1.8%)	
	Farmers groups[7]	51 (2.3%)	27 (1.2%)	78 (1.8%)	
	One-acre fund[7]	322 (14.5%)	65 (2.9%)	387 (8.7%)	
	Other	141 (6.4%)	129 (5.8%)	270 (6.1%)	

3.3 Prevalence of disability

Overall, 17.2% of the respondents reported a disability based on the tool used in this study (Table 5). There was no significant difference between control and intervention areas. The most common domain of functional difficulty was mobility, with 5.7% of respondents experiencing difficulties in that domain.

Anxiety and depression were also cited frequently, with respectively 7.1% and 5.2% of participants reporting these. The proportions of participants reporting anxiety and was significantly higher in control than intervention areas (8.7% v 5.5%), similarly with depression (6.8% in control vs 3.7% in intervention areas).

Table 5: Prevalence of disability and of difficulty in functional domains

		Control	Intervention	Overall	P
Disability status	With disability	421 (18.9%)	346 (15.5%)	767 (17.2%)	0.22
	Without disability	1802 (81.1%)	1890 (84.5%)	3692 (82.8%)	
Functional domain					
Vision[8]	Yes	57 (2.6%)	79 (3.5%)	136 (3.1%)	0.40
	No	2166 (97.4%)	2157 (96.5%)	4323 (96.9%)	
Hearing[8]	Yes	15 (0.7%)	15 (0.7%)	30 (0.7%)	0.99
	No	2208 (99.3%)	2221 (99.3%)	4429 (99.3%)	
Mobility[8]	Yes	135 (6.1%)	120 (5.4%)	255 (5.7%)	0.61
	No	2088 (93.9%)	2116 (94.6%)	4204 (94.3%)	
Cognition[8]	Yes	38 (1.7%)	58 (2.6%)	96 (2.2%)	0.33
	No	2185 (98.3%)	2178 (97.4%)	4363 (97.8%)	
Self-care[8]	Yes	14 (0.6%)	19 (0.8%)	33 (0.7%)	0.53
	No	2209 (99.4%)	2217 (99.2%)	4426 (99.3%)	

		Control	Intervention	Overall	P
Communication[8]	Yes	1 (0.0%)	4 (0.2%)	5 (0.1%)	0.15
	No	2222 (100.0%)	2232 (99.8%)	4454 (99.9%)	
Anxiety[9]	Yes	193 (8.7%)	122 (5.5%)	315 (7.1%)	**0.02**
	No	2030 (91.3%)	2114 (94.5%)	4144 (92.9%)	
Depression[9]	Yes	151 (6.8%)	83 (3.7%)	234 (5.2%)	**0.01**
	No	2072 (93.2%)	2153 (96.3%)	4225 (94.8%)	

3.4 Study Outcomes

3.4.1 Employment

Nearly 79% of participants were classified as employed (Table 6). Among those, the vast majority had an informal main job (92.9%), with only 7.1%having a formal main job. The majority of respondents were classified as independent workers without employees (63.2%), while 18.0% were classified as employers and 15.8% as employees. Finally, 23.3% of the employed persons were in time-related under-employment (defined as per a threshold of 40 hours per week). No significant differences were observed between those from control and intervention areas.

Table 6: Employment outcomes

		Control	Intervention	Overall	P
Employment status	Employed	1744 (78.6%)	1761 (78.8%)	3505 (78.7%)	0.96
	Unemployed	475 (21.4%)	473 (21.2%)	948 (21.3%)	
Status in employment[10] (ICSE-18-A)	Contributing family worker	20 (1.1%)	12 (0.7%)	32 (0.9%)	0.11
	Dependent contractor	18 (1.0%)	58 (3.3%)	76 (2.2%)	
	Employee	265 (15.2%)	286 (16.3%)	551 (15.8%)	
	Employer	281 (16.1%)	348 (19.8%)	629 (18.0%)	
	Independent worker without employees	1157 (66.5%)	1052 (59.9%)	2209 (63.2%)	
Nature of main job	Persons with informal main job	1614 (92.9%)	1628 (92.8%)	3242 (92.9%)	
	Persons with formal main job	123 (7.1%)	126 (7.2%)	249 (7.1%)	
Employed persons in time-related underemployment[11]	Yes	437 (25.1%)	379 (21.5%)	816 (23.3%)	0.33
	No	1307 (74.9%)	1382 (78.5%)	2689 (76.7%)	

3.4.2 Factors associated with employment outcomes

Interesting patterns of association appeared when examining the relationship between employment outcomes and socio-demographic characteristics at baseline (Table 7). Older people were more likely to be unemployed and to have an informal (rather than formal) main job than younger people. They were, however, less likely to be in time related underemployment compared to younger people.

Men were less likely than women to be unemployed. They were also less likely to be in time-related underemployment or have an informal main job.

Those who had attended school were less likely to have an informal main job compared to those who had never attended school. There was no evidence of a statistically significant association between marital status and employment outcomes.

Those from wealthier quintiles were less likely to have an informal main job and to be in time-related unemployment compared to those from the poorest quintiles.

Finally, members of farmer groups were less likely to be unemployed compared to those who weren't members of these groups.

People with disabilities were more likely to be unemployed than those without disabilities. There was no statistically significant difference between intervention and control areas in terms of determinants of employment outcomes.

Table 7: Employment outcomes – univariate associations – Data are Odds-ratios and associated 95% confidence intervals from logistic regression models

	Outcome		
Covariate	**Employed**	**Informal main job**	**In time-related underemployment**
Age	**0.97 [0.96, 0.98]**	**1.01 [1.00, 1.02]**	**0.99 [0.98,0.99]**
Sex (Men vs Women)	**1.29 [1.08,1.54]**	**0.36 [0.27, 0.47]**	**0.81 [0.65,1.00]**
Ever attended school (Yes vs No)	1.29 [0.89, 1.86]	**0.19 [0.04, 0.80]**	0.95 [0.68,1.33]
Current marital status (ref=Married/cohabiting)			
Single	0.99 [0.57, 1.72]	1.71 [0.77, 3.80]	0.90 [0.53,1.51]
Widowed	0.92 [0.68, 1.24]	1.80 [0.98, 3.33]	0.81 [0.63,1.05]
Wealth quintile (Wealthier Q3-Q5 vs poorest Q1,Q2)	1.11 [0.89, 1.40]	**0.31 [0.22, 0.44]**	**0.76 [0.62,0.94]**
Member of a formal/informal group of farmers	**1.46 [1.10, 1.93]**	0.65 [0.41, 1.01]	0.82 [0.65,1.05]
With disability (ref: without disability)	**0.59 [0.44, 0.78]**	1.42 [0.87, 2.32]	1.04 [0.81,1.33]
Arm: Intervention vs control	0.94 [0.51, 1.72]	1.11 [0.73, 1.67]	0.81 [0.54,1.20]

Status in employment was examined relatively to being "independent workers without employees" as this was the largest category of workers observed in the sample. Results (Table 8) showed that younger people were more likely to be employees than independent workers, compared to older people. Men were more likely to be employees or employers compared to women. Divorced individuals were more likely to be employees than independent workers compared to those married or cohabitating with a partner. Wealthier individuals were more likely to be employers.

Contributing family workers and domestic contractors made up only approximately 3% of the sample and results suggested that single people were more likely to be contributing family workers than independent workers, compared to those married or cohabitating with a partner while dependent contractors appeared more likely to be from intervention compared to control areas.

Table 8: Status in employment[12] – univariate associations –Data are Odds-ratios and associated 95% confidence intervals from multinomial logistic regression models

Covariate	Status in employment			
	Contributing family worker	Dependent contractor	Employee	Employer
Age	0.98 [0.95,1.02]	0.99 [0.98,1.01]	**0.98 [0.97,0.99]**	1.01 [1.00,1.01]
Sex (Men vs Women)	1.08 [0.53,2.22]	1.83 [0.98,3.40]	**3.75 [2.91,4.84]**	**2.84 [2.21,3.64]**
Ever attended school (Yes vs No)	0.57 [0.16,2.02]	1.62 [0.45,5.80]	1.25 [0.75,2.07]	**1.78 [1.16,2.73]**
Marital status (ref=Married /cohabitating)				
Single	3.48 [1.40,8.64]	0.40 [0.05,3.13]	**1.35 [0.87,2.10]**	0.67 [0.35,1.28]
Widowed	0.52 [0.15,1.77]	1.15 [0.48,2.76]	1.32 [0.89,1.95]	1.09 [0.86,1.38]
Wealth quintile (Wealthier Q3-Q5 vs poorest Q1,Q2)	1.68 [0.80,3.54]	1.30 [0.78,2.16]	1.17 [0.93,1.47]	**2.43 [2.00,2.95]**
Member of a formal/informal group of farmers	1.06 [0.50,2.22]	1.16 [0.73,1.86]	0.92 [0.68,1.25]	1.04 [0.75,1.44]
With disability (ref: without disability)	1.16 [0.49,2.71]	0.84 [0.43,1.63]	0.86 [0.64,1.15]	1.10 [0.87,1.40]
Arm: Intervention vs control	0.63 [0.24,1.69]	**3.40 [1.61,7.16]**	1.04 [0.66,1.64]	1.29 [0.75,2.22]

3.4.3 Confidence in exercising labour rights

The median score of the sample was 41 (IQR=36-45), there was no significant difference between control and intervention areas.

As show in Table 9, interesting patterns of association were observed. Men, those who had ever attended school, wealthier people, members of farmer groups had on average higher confidence scores compared to, respectively, women, those who never attended school, those from the poorest quintiles, those who were not members of farmer groups. Conversely, widowed respondents had on average lower scores than those who were married or cohabitating with a partner).

Table 9: Score of confidence – univariate associations – Data are estimates and associated 95% confidence intervals from regression models

		Confidence score
Age		-0.02 [-0.04, 0.00]
Sex (Men vs Women)		0.74 [0.26, 1.23]
Ever attended school (Yes vs No)		1.26 [0.37, 2.15]
Marital status (ref=Married/cohabiting)	Single	0.50 [-0.74, 1.74]
	Widowed	-0.68 [-1.19,-0.16]
Wealth quintile (Wealthier Q3-Q5 vs poorest Q1,Q2)		1.06 [0.23, 1.89]
Member of a formal/informal group of farmers		1.36 [0.57, 2.15]
With disability (vs without disability)		0.09 [-0.83, 1.02]
Arm: Intervention vs control		-1.29 [-2.95, 0.38]

3.4.4 Disability barriers, accommodations, attitudes and social protection

Barriers to employment were examined among the 262 individuals who had a disability and were unemployed (Table 10). The most frequently cited factors that would make it more likely for them to seek or find a job was help in locating appropriate jobs (41.2%), getting higher qualifications/training/skills (34.6%) and the availability of a suitable transportation to and from the workplace (33.1%). Other factors such as more positive attitudes towards people with disabilities, availability of special equipment/assistive devices and a more accommodating workplace were also all cited by more than a quarter of the respondents.

Although 44.3% of respondents indicated that their family would be supportive if they decided to work, 37.2% conversely reported that their family would not be supportive of this decision.

Table 10: Barriers to employment among unemployed people with disabilities

		Control (N=147)	Intervention (N=115)	Overall (N=262)	P
Factors[13] that would make it more likely to seek or find a job	Getting higher qualifications/training/skills	34 (23.3%)	55 (49.5%)	89 (34.6%)	0.05
	Availability of suitable transportation to and from workplace	31 (21.2%)	54 (48.6%)	85 (33.1%)	0.19
	Help in locating appropriate jobs	48 (32.9%)	58 (52.3%)	106 (41.2%)	0.34
	More positive attitudes towards persons with disabilities	33 (22.6%)	45 (40.5%)	78 (30.4%)	0.53
	Availability of special equipment or assistive devices	32 (21.9%)	43 (38.7%)	75 (29.2%)	0.46
	Availability of more flexible work schedules or work tasks arrangements	28 (19.2%)	34 (30.6%)	62 (24.1%)	0.49
	Availability of a more accommodating workplace	32 (21.9%)	50 (45.0%)	82 (31.9%)	0.37
	Others	49 (33.6%)	33 (29.7%)	82 (31.9%)	0.82

		Control (N=147)	Intervention (N=115)	Overall (N=262)	P
How supportive would your family members be if you decide to work?	Not supportive	59 (41.3%)	35 (31.8%)	94 (37.2%)	0.59
	Somewhat supportive	33 (23.1%)	14 (12.7%)	47 (18.6%)	
	Very supportive	51 (35.7%)	61 (55.5%)	112 (44.3%)	

Table 11 shows that, among the 500 people with disabilities who were employed, 30.6% had a work schedule or tasks that accommodated in some manner for their difficulties whereas 50.8% did not have any. Around a fifth of employed respondents with disabilities reported they did not have difficulties that required accommodation.

More than half of the respondents (56.8%) reported that their workplace had not been modified to account for their difficulties, whereas 23% reported modifications had been made. Around a fifth of employed respondents with disabilities reported they did not have difficulties that required accommodations in terms of workplace. There was no significant difference between control and intervention areas.

Table 11: Accommodations at workplace among employed people with disabilities

		Control (N=273)	Intervention (N=227)	Overall (N=500)	P
Work schedule/tasks arranged to account for difficulties	Yes, fully	29 (10.6%)	47 (20.7%)	76 (15.2%)	0.56
	Yes, partially	44 (16.1%)	28 (12.3%)	72 (14.4%)	
	Not at all	152 (55.7%)	102 (44.9%)	254 (50.8%)	
	Do not have difficulties that require accommodation	48 (17.6%)	50 (22.0%)	98 (19.6%)	
Workplace modified to account for difficulties	Yes, fully	28 (10.3%)	36 (15.9%)	64 (12.8%)	0.34
	Yes, partially	19 (7.0%)	32 (14.1%)	51 (10.2%)	
	Not at all	172 (63.0%)	112 (49.3%)	284 (56.8%)	
	I do not have difficulties that require accommodation	54 (19.8%)	47 (20.7%)	101 (20.2%)	

Only slightly more than half of the respondents with disabilities felt employers were willing to hire people with disabilities, whereas 47.4% felt they were unwilling (Table 12). The proportion of those who thought employers were willing to hire people with disabilities was slightly higher in intervention (54%) than control (51.4%) areas. The majority of respondents with disabilities thought workers were willing to work alongside people with disabilities (68.2%), with no significant differences between control and intervention areas.

Table 12: Views among people with disabilities on attitudes at workplace

		Control	Intervention	Overall	P
Willingness of employers to hire persons with disabilities	Very willing	87 (21.2%)	95 (28.5%)	182 (24.5%)	0.05
	Somewhat willing	124 (30.2%)	85 (25.5%)	209 (28.1%)	
	Unwilling	199 (48.5%)	153 (45.9%)	352 (47.4%)	
Willingness of workers to work alongside persons with disabilities	Very willing	109 (26.5%)	103 (30.0%)	212 (28.1%)	0.80
	Somewhat willing	175 (42.6%)	127 (37.0%)	302 (40.1%)	
	Unwilling	127 (30.9%)	113 (32.9%)	240 (31.8%)	

As shown in Table 13, only 10.6% (N=81) of those identified as having a disability using the Washington Group Questions had an official certification of disability. Among these 81 respondents, very few received cash benefits (N=8) or goods and services (N=4) from the government relating to their disability.

Table 13: Social protection among people with disabilities

		Control	Intervention	Overall	P
Have the difficulties you have been officially recognized (certified) as a disability?	Yes	30 (7.1%)	51 (14.7%)	81 (10.6%)	0.25
	No	391 (92.9%)	295 (85.3%)	686 (89.4%)	
Do you receive any cash benefits from the government linked to your disability	Yes	3 (10.0%)	5 (9.8%)	8 (9.9%)	0.94
	No	27 (90.0%)	46 (90.2%)	73 (90.1%)	
Do you receive any goods or services from the government linked to your disability?	Yes	1 (3.3%)	3 (5.9%)	4 (4.9%)	0.73
	No	29 (96.7%)	48 (94.1%)	77 (95.1%)	

3.4.5 Stigma, discrimination and support towards people with disabilities

Among the 3692 respondents without disabilities, 41% reported they had heard of or witnessed stigma and discrimination, within the community, of people with disabilities and 64% reported they had heard of or witnessed support, within the community, towards people with disabilities. The proportion of those reporting support within the community was significantly higher in intervention than control areas (71% vs 57%, p<0.01), the proportion of those reporting stigma and discrimination within the community was also higher in intervention areas (45.1% vs 37.6%) although the difference was not statistically significant (p=0.05).

When exploring patterns of association (Table 14), we found that those who had attended school were more likely to report discrimination/stigma towards people with disabilities within the community. Men more likely to report perceived support towards people with disabilities than women.

Table 14: Perceived stigma or support towards people with disabilities – univariate associations – Data are Odds-ratios and associated 95% confidence intervals from logistic regression models

		Outcome	
Covariate		**Any perceived discrimination/stigma**	**Any perceived support**
Age		1.00 [1.00,1.01]	1.00 [0.99,1.00]
Sex (Men vs Women)		1.14 [1.00,1.30]	**1.31 [1.12,1.53]**
Ever attended school (Yes vs No)		**1.47 [1.16,1.85]**	1.14 [0.85,1.52]
Marital status (ref=Married/cohabiting)	Single	0.82 [0.55,1.22]	1.05 [0.73,1.53]
	Widowed	1.10 [0.84,1.42]	1.11 [0.85,1.43]
Wealth quintile (Wealthier Q3-Q5 vs poorest Q1,Q2)		0.96 [0.81,1.13]	1.18 [0.96,1.44]
Member of a formal/informal group of farmers		1.01 [0.82,1.26]	1.03 [0.86,1.22]
Arm: Intervention vs control		1.36 [0.98,1.87]	**1.78 [1.26,2.53]**

Among the 767 individuals with disabilities, 38% reported having experienced stigma and discrimination and 39% reported experiencing support. The proportion of those having experienced any support was significantly higher in intervention than control areas (46.8% vs 32.1%, p=0.04). As shown in Table 15, men with disabilities were more likely to have experienced support related to their disability compared to women with disabilities.

Conversely, widowed respondents with disabilities were more likely to have experienced stigma and discrimination compared to married/cohabiting respondents with disabilities.

Table 15: Experienced stigma or support towards people with disabilities – univariate associations – Data are Odds-ratios and associated 95% confidence intervals from logistic regression models

		Outcome	
Covariate		**Any experienced discrimination/stigma**	**Any experienced support**
Age		1.01 [1.00,1.02]	1.01 [1.00,1.03]
Sex (Men vs Women)		1.25 [0.87,1.81]	**1.44 [1.03,2.02]**
Ever attended school (Yes vs No)		0.69 [0.37,1.31]	0.80 [0.50,1.28]
Marital status (ref=Married/cohabiting)	Single	0.55 [0.21,1.48]	0.61 [0.24,1.56]
	Widowed	**1.51 [1.00,2.29]**	0.85 [0.56,1.28]
Wealth quintile (Wealthier Q3-Q5 vs poorest Q1,Q2)		0.92 [0.69,1.24]	1.08 [0.74,1.57]
Member of a formal/informal group of farmers		0.87 [0.57,1.32]	0.88 [0.61,1.26]
Arm: Intervention vs control		1.26 [0.78,2.04]	**1.84 [1.06,3.19]**

4.0 Conclusions

The impact evaluation seeks to determine the GLP programme's ability to affect farmers labour markets outcomes. We conducted a baseline survey to learn the pre-intervention status of sorghum farmers in the programme catchment areas and to check that the intervention and control conditions were comparable before the interventions began. To that end, we collected data from a large sample of 4,459 individuals that were randomly selected from 40 sublocations across 14 sub-counties.

As our areas were not randomly allocated to the intervention and control groups, unsurprisingly, we found evidence of some differences between those from control and intervention areas, regarding the proportion of men vs women among the respondents and the proportion of those who were members of farmers groups.

Only a very small proportion of respondents had heard about the farmer hubs. And among those who had, only a small proportion had ever actually been to a farmer hub. The baseline survey suggested there might be other actors in control areas such as One Acre Fund, that people go to for farming advice or inputs, these will need to be accounted for and more information is needed here.

Outcomes were generally balanced between control and intervention areas; the main difference was in terms of experienced and perceived support towards people with disabilities.

The baseline survey revealed interesting patterns of association between farmer's characteristics and the outcomes of interest as some groups of farmers are disadvantaged in terms of employment outcomes and confidence in exercising their rights. Women, those without formal education, those in the poorest households and those with disabilities appear to be among those disadvantaged.

These will need to be accounted for in the endline statistical analyses in order to best disaggregate the effect of our interventions from the effect of other ongoing interventions by other organisations in these same areas.

In addition, nested in-depth case studies of farmers will be conducted to provide qualitative data that would facilitate the contextualized interpretation of trial findings.

4.1 Methodological implications for the endline

It will be very important to map out actors and other interventions that may be occurring in the control areas as well as anything outside GLP programme happening in intervention areas.

It will also be important to explain the higher prevalence of membership of farmers groups in control areas.

Finally, we need to understand if OPDs and other livelihood support organisations are potentially more active in some intervention areas, or if disability awareness programs are being conducted there given our findings regarding experienced and perceived support towards people with disabilities.

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Endnotes

[1] ILO Variable derivation guide for ILO Module LFS questionnaire for PAPI – Agriculture work start (v1) available from **ilostat.ilo.org/resources/lfs-resources**

[2] Highest level of completed education among those who attended school

[3] From other individuals/government/organizations

[4] The categories are not mutually exclusive as a respondent could select multiple benefits

[5] The modalities "Market", "Farmers group", and "One Acre Fund" were not proposed in the questionnaires, these were derived from free-text responses provided by the respondents who had indicated their response did not appear on the questionnaire. "Bought in shop" responses were manually recoded as bought in store

[6]

[7] The categories "Seminars", "Chief meetings/barazas" and "farmers groups" responses were recoded based on free-text specification to "other" responses, they were not options on the questionnaire.

[8] Defined as a response of "Cannot do at all" or "A lot of difficulty" to the question pertaining to each functional domain

[9] Defined as a response of "daily"

[10] Among the 3,505 employed persons

[11] Using a threshold of 40 hours per week

[12] The reference level used for the outcome was the largest category independent workers without employees

[13] The categories are not mutually exclusive, individuals could select several factors

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