



## HEIFER INTERNATIONAL UGANDA COVID-19 IMPACT STUDY REPORT

### PREPARED BY:

**Paul Muliika** | Planning, Monitoring, Learning and Evaluation Manager

**Abby Bwogi** | Regional Monitoring, Learning and Evaluation Manager EAYIP

**John Ssenyonga** | Heifer International Senior Programs Manager

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# EXECUTIVE SUMMARY

## INTRODUCTION

On March 25, 2020, Heifer Uganda suspended all office-based work and staff were requested to work from home following the country's lockdown to combat the spread of COVID-19. Field activities were limited to essential services related to farm production as stipulated by the Ugandan government under the COVID-19 guidelines.

Heifer Uganda decided to conduct a deeper study to understand the effects of COVID-19 on targeted participants, including youth, farmer agri-hubs and other value chain actors such as off-takers and input providers. This report provides summary findings gathered from 448 smallholder farmers in Eastern, Central and Northern regions, along with qualitative data from 10 agri-hubs, four private sector business partners and three district local governments. The participating projects are *Accelerate Dairy Production and Productivity* project (ADAP), *East Africa Youth Inclusion Program* (EAYIP), *Learn4Agribusiness* project (L4A), *Jinnai Dairy Development Pilot* project (JDDP) and *Sirrolli Enterprise Facilitation* (EF).

## SUMMARY FINDINGS

The majority of respondents — 97% — reported that COVID-19 has affected their income. Of the 436 farmers who responded to this question, 388 (86.6%) reported a reduction in income by 50%. Respondents previously earning an average of more than 100,000 Ugandan shillings (\$27 USD) per month have seen their income drop to 50,000 Ugandan shillings (\$13.50 USD) or less. Limited access to markets due to travel restrictions created an overflow, especially for perishable agricultural products such as fruits, vegetables and eggs, leading to low prices, yet the costs of accessing inputs remained high. Consequently, income for smallholder farmers dropped significantly.

Similarly, income of agri-hubs and private sector business companies has been reduced by half due to a fall in aggregate demand, leading to a reduction in price of commodities and volumes bulked and marketed. Further, 83% of respondents stopped group savings and others slowed down due to COVID-19 restrictions. This was experienced mostly in the Northern region, where savings groups are deeply grounded and communities have a stronger social capital setup.

Even though agricultural activities were not restricted by government during the COVID-19 lockdown, 71% of respondents revealed that farmers had limited access to production inputs. Additionally, the price of production inputs rose due to limited supply, as some suppliers closed, leading to an inflation by a few suppliers in the market. Relatedly, 79% of respondents experienced limited access to markets for their produce because of the closure of periodic face-to-face markets, consequently affecting their income.

Before COVID-19, 72% of families had three meals per day and during COVID-19, only 13% of respondents have at least three meals per day. This means that the majority (87%) eat less than three meals per day, with a significant 31% eating one meal per day. The most affected families were those in periurban and urban areas that depended on daily incomes for food.

Almost half of respondents (42%) have experienced domestic violence or conflict, and 38% of respondents have received financial or nonfinancial support from their neighbors, whereas 58% of the respondents have given financial or nonfinancial support to their neighbors.

Handwashing emerged as the most adopted practice, reported by 97% of respondents. Other adopted practices include covering the mouth and nose using a face mask, maintaining social distance, handwashing using soap and water, and avoiding sneezing and spitting in public places.

In all the districts, service delivery to farmers has been affected due to government restrictions on movement and public gatherings. Services affected most are education, extension, small-scale businesses, cooperative operations and regional markets for farmer produce.

## RECOMMENDATIONS

It is important for programs to prioritize interventions that will support households to regain business momentum and recover from the shock in the short and medium terms. Aspects of capitalization and business development services were the needs presented most by respondents.

Business services include supporting small and medium enterprises (SMEs), helping smallholder farmers develop marketing channels using e-commerce platforms that connect buyers and sellers, implementing product repackaging to fit the new normal, and teaching business management skills. There should be specific assessments of target communities to identify those that fall under such categories to offer relevant support, as opposed to implementing general interventions for all households irrespectively.

There is a need to strengthen informal savings and lending associations using creative approaches, such as mobile phones and online savings and lending platforms. This enables activities to continue even amid similar crises.

Private sector actors' businesses were affected in several ways, with the most obvious impact being shrinking markets due to reduced purchasing power and the closure of some business entities.

Dairy cooperatives reduced their daily milk collections and sales to processors due to a downward fall in processing. Other off-takers and input providers in poultry, oil seeds and horticulture were equally affected with low sales, consequently reducing their labor force.

For micro, small and medium enterprises, as well as smallholder farmers, access to capital is the greatest need and will enable these businesses to bounce back. In addition, enterprises need access to business development services to restructure their business models to fit into the new normal.

# INTRODUCTION

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On January 30, 2020, the World Health Organization declared the outbreak of coronavirus disease (COVID-19) a Public Health Emergency of International Concern. The virus is highly infectious and transmits by respiratory droplets when an infected person coughs or sneezes. As of today, most of the world has been affected, including Uganda, where the first case was reported on March 21. As a result, all Ugandan borders and points of entry were closed, and the government of Uganda announced a lockdown to prevent introduction of the disease to new areas and to reduce human-to-human transmission in areas where the virus was already circulating. As of August 26, 2020, Uganda has 2,524 confirmed COVID-19 cases (1,268 recoveries, 26 deaths) (Source: Ministry of Health website [www.health.go.ug/](http://www.health.go.ug/)).

In compliance to government guidelines and presidential directives, Heifer Uganda suspended all office-based work and all staff were requested to work from home. Field activities were limited to essential services related to farm production for the targeted farmer participants. To ensure continuity of essential service delivery to the smallholder farmers, Heifer Uganda tapped into the created community structures, such as community facilitators, Community Agri-Entrepreneurs (CAEs) and Community Agro-Veterinary Entrepreneurs (CAVEs) to reach out to farmers while observing the government and Ministry of Health safety guidelines. In addition, Heifer Uganda leveraged the existing collaboration with the districts to engage the production officers to support field activities through the District Resident Commissioners (RDCs). These community structures also helped Heifer Uganda staff understand how targeted participants were responding to and coping with COVID-19 through weekly reports.

Based on the information received, Heifer Uganda decided to conduct a deeper study to understand the extent of the effect of COVID-19 on targeted participants, including youth, farmer agri-hubs and other value chain actors such as off-takers and input providers. The study looks at the impact on the income of farmers, established agri-hub businesses and other private sector business partners, along with their relationship to the farmers. It also looks at the effect on service delivery by the public sector, mainly the district local government.

This report provides summary findings gathered through a survey of 448 smallholder farmers and qualitative data from 10 agri-hubs, four private sector business partners and three district local governments.

# SURVEY PURPOSE

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To provide data and evidence of COVID-19 impact on Heifer-supported farmers, securing partners to inform planning and implementation of Heifer projects after COVID-19.

## METHODOLOGY AND TOOLS

A mixed-methods approach with quantitative and qualitative methods was used to collect data from the respondents. The purpose was to gather quantitative data and capture the experiences of the private and public sector actors during the COVID-19 period. Both qualitative and quantitative tools were used: a questionnaire to collect survey data from the smallholder farmers and Key Informant Interview Guides for the private and public sector actors. Data was collected primarily via phone calls, although there were some visits to respondents, especially smallholder farmers and micro enterprises.

## RESPONDENT DEMOGRAPHIC CHARACTERISTICS

A total of 448 smallholder farmers were surveyed across five projects. In addition, key informant interviews (KIIs) were completed for three district local government representatives, 10 agri-hub leaders and five private sector actors. The participating projects are *Accelerate Dairy Production and Productivity (ADAP)*, *East Africa Youth Inclusion Program (EAYIP)*, *Learn4Agribusiness project (L4A)*, *Jinnai Dairy Development Pilot project (JDDP)* and *Sirolli Enterprise Facilitation (EF)*. Below is a summary of the farmers interviewed per project by region. NA means no project presence in the region.

PROJECT NAME	REGION OF OPERATION			TARGET RESPONDENTS	ACTUAL RESPONDENTS	PERCENT
	CENTRAL	EASTERN	NORTHERN			
ADAP	40	NA	NA	270	40	9%
EAYIP	198	93	NA	300	291	65%
JDDP	NA	NA	34	32	34	7.5%
L4AB	NA	NA	51	60	51	11.4%
EF	24	8	NA	30	32	7.1%
GRAND TOTAL	262	101	85	692	448	100%

Table 1: Distribution of respondents by project and region

A total of 448 farmers/youth were interviewed across the three regions out of the 692 targeted respondents, with a response rate of 65%. The largest number of respondents (65%) are youth (or young people aged 17-30) drawn from EAYIP.

## SEX OF RESPONDENTS AND HOUSEHOLD HEAD

The majority (60%) of respondents are male, while 40% are female. Similarly, 70% of households are male-headed.

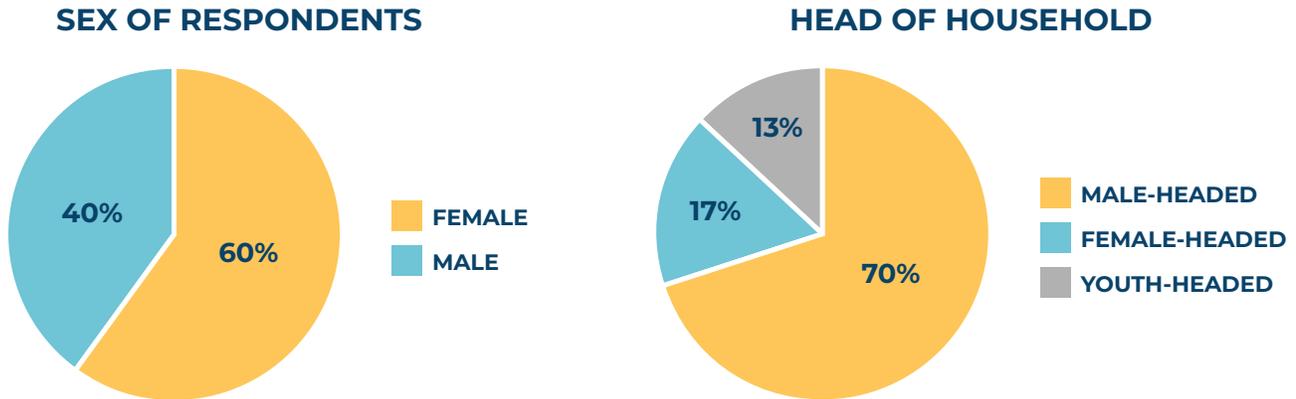


Figure 1 and 2: Sex and head of household

## AGE OF RESPONDENTS AND HOUSEHOLD SIZE

The average age of respondents is 30. The average household size is 6.7 people across the regions. This is in line with the national average of five people according to the Uganda National Household Survey (Version VI, 2017). The figure below shows the average household size by region.

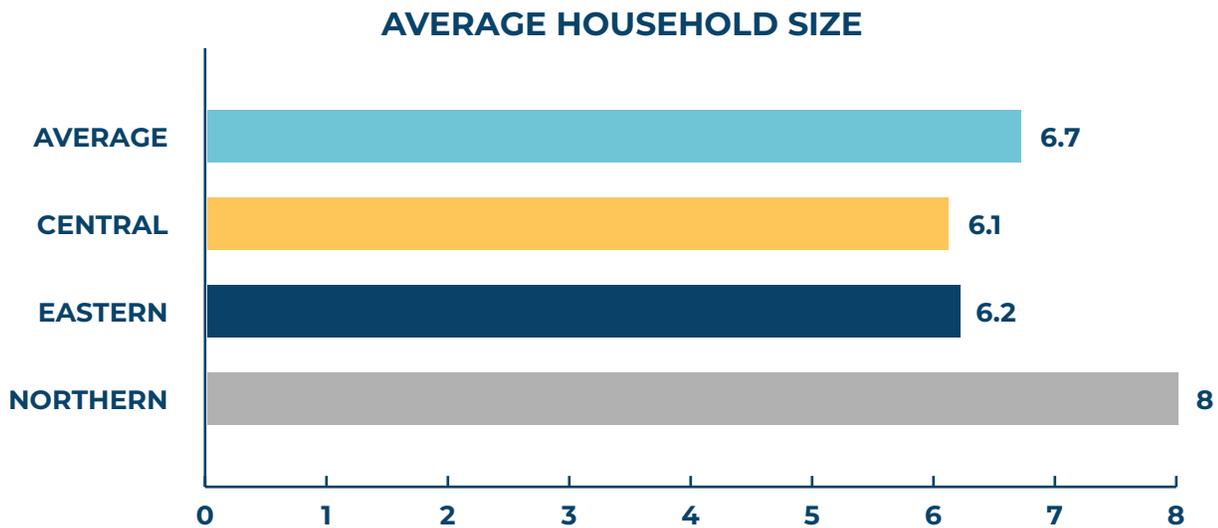


Figure 3: Average household size by region

# QUANTITATIVE FINDINGS

This section presents summary statistics on the effect of COVID-19 from 448 participants on family income and income-generating activities (IGA), informal savings and lending activities, farm and off-farm production and marketing, access to food, family decision-making and relationships, natural resources management, and family hygiene, sanitation and health.

## 1. EFFECT OF COVID-19 ON FARMER INCOMES

### MAIN INCOME SOURCE AND COVID-19 EFFECT ON FARMER INCOMES

Crop production is the major source of income for the majority (47%) of the farmers across the three regions of operation. Twenty-one percent of total respondents reported business and retail activities as the main source of income, followed by 15% reporting livestock and byproducts.

MAIN SOURCE OF INCOME	REGION OF OPERATION			
	CENTRAL	EASTERN	NORTHERN	GRAND TOTAL
BUSINESS & RETAIL ACTIVITIES	21.8%	24.8%	14.1%	21.0%
CROPS & GARDEN PRODUCE	34.4%	65.3%	63.5%	46.9%
LIVESTOCK & BYPRODUCTS	21.4%	2.0%	11.8%	15.2%
SALARIES & WAGES	14.9%	2.0%	7.1%	10.5%
OTHER	7.5%	5.9%	3.5%	6.4%
GRAND TOTAL	100%	100%	100%	100%

Table 4: Main source of household income

### COVID-19 EFFECT ON FARMER INCOMES

Regarding COVID-19 effect on farmer incomes, the majority (97%) of respondents reported that their income has been affected. Of the 436 respondents, 388 (89%) reported a reduction in income; 41 (10%) reported not earning at all and two people reported an increase in income.

USUAL EARNING FROM IGA PER MONTH	INCOME INCREASED	INCOME IS THE SAME	INCOME REDUCED	NOT EARNING	GRAND TOTAL
Less than 100,000	0	3	71	13	87
100,001-200,000	0	0	136	15	151
200,001-300,000	1	0	62	10	73
300,001-400,000	0	0	45	4	49
400,001-500,000	1	0	26	0	27
Above 500,000	0	0	48	1	49
GRAND TOTAL	2	3	388	43	436

Table 5: Effect of COVID-19 on farmer incomes

\*100,000 Ugandan shillings = \$27 USD

\*\*Currency conversions reflect date the report was finalized.

## CURRENT FARMER INCOMES

Overall, 279 (72%) farmers previously earning more than 100,000 Ugandan shillings (\$27 USD) had their income drop, with the majority reporting a reduction of more than half. The most affected category of farmers were those who used to earn 100,000–200,000 Ugandan shillings (\$27–54 USD), with data indicating that 132 (97%) saw their income drop to less than 100,000 Ugandan shillings (\$27 USD). The reduction in income grossly affected household access to food, with most families consuming one meal per day instead of three meals consumed before COVID-19. In addition, a fall in household income had a direct effect on businesses where families used up their savings and consumed the working capital from the businesses, hence the need for capital to restart the same businesses or invest in new lines of business. Twenty-five percent of the households took up microloans from friends and relatives as a coping mechanism for survival.

USUAL EARNING FROM IGA PER MONTH	Less than 100,000	100,001-200,000	200,001-300,000	300,001-400,000	400,001-500,000	GRAND TOTAL
Less than 100,000	70	1	0	0	0	71
100,001-200,000	132	3	0	1	0	136
200,001-300,000	39	22	0	1	0	62
300,001-400,000	13	21	11	0	0	45
400,001-500,000	7	1	9	8	1	26
Above 500,000	18	5	4	6	15	48
GRAND TOTAL	279	53	24	16	16	388

Table 6: Earnings from IGA before and during COVID-19

## **JAMES KWEBANGIRA | YOUTH REPRESENTATIVE ON THE DWANIRO LIVESTOCK DAIRY COOPERATIVE SOCIETY BOARD OF DIRECTORS**

James used to transport 250 liters of milk per day from the farms to the cooperative at a cost of 80 per liter paid as commission, fetching 20,000 Ugandan shillings (\$5.40 USD) per day. Now, he is only able to transport 180 liters per day at the same cost. His daily income has dropped to 14,400 Ugandan shillings (\$3.90 USD), leading to an income loss of 5,600 Ugandan shillings (\$1.50 USD) per day. This has affected James' livelihood, as he still has to feed his family of four.

## **FARMERS COPING WITH REDUCED INCOME**

To cope with the reduction in household income, the majority (66%) of farmers are surviving on savings and borrowing or receiving cash from friends and relatives. It is worth noting that 6% of respondents are surviving on business capital. It is possible that they may not be able to return to business after COVID-19. Despite the coping strategies explored by families, none of them reported having a strategy or a combination of them that closed the income gap created by COVID-19. The majority deployed more than two strategies, mainly surviving on savings, borrowing and surviving on business capital.

<b>COPING STRATEGY</b>	<b>COUNT</b>	<b>PERCENT</b>
BORROWING OR RECEIVING CASH FROM NEIGHBORS	10	2.6%
CONSUMING SEED STOCKS HELD FOR NEXT SEASON	16	4%
GETTING SUPPORT FROM GOVERNMENT	7	1.8%
GETTING SUPPORT FROM NGO/COMMUNITY-BASED ORGANIZATIONS (CBOS)	13	3.4%
REDUCING AMOUNT OR NUMBER OF MEALS	7	1.8%
SELLING PRODUCTIVE ASSETS [FARM MACHINES, MOTORBIKES, ETC]	4	1%
<b>BORROWING OR RECEIVING CASH FROM FRIENDS OR RELATIVES</b>	<b>96</b>	<b>25%</b>
BORROWING OR RECEIVING FOOD FROM FRIENDS OR RELATIVES	30	7.7%
BORROWING OR RECEIVING FOOD FROM NEIGHBORS	11	2.8%
SURVIVING FROM BUSINESS CAPITAL	22	5.6%
<b>SURVIVING ON PAST SAVINGS</b>	<b>172</b>	<b>44.3%</b>
GRAND TOTAL	388	100%

Table 7: Coping strategies in response to reduced income

## OTHER SAFETY NETS OR NEW ALTERNATIVE SOURCES OF INCOME

The survey also sought to find out if there were other safety nets or new alternative sources of income developed by farmers during the COVID-19 period. The most common way farmers did this was by changing to new business activities, as reported by 39%. Many (24%) also resorted to offering casual labor. A big shift was noticed from general merchandise to farming, which was categorized as essential services and goods by government to continue running. The majority of farmers ventured into vegetable production to generate quick incomes.

Sixteen percent of the respondents solicited for relief from family members, neighbors or friends. The majority of youth resorted to providing casual labor as an alternative source of income.

SAFETY NET OR ALTERNATIVE INCOME SOURCE DEVELOPED	CENTRAL	EASTERN	NORTHERN	GRAND TOTAL
SOLICITING RELIEF FROM NEIGHBORS OR FRIENDS	4.6%	1%	5.9%	3.8%
SOLICITING RELIEF FROM EXTENDED FAMILY MEMBERS	14.1%	9.9%	2%	8.7%
CHANGE IN TYPE OF BUSINESS	40.5%	42.6%	21.6%	34.9%
OFFERING CASUAL LABOR	11.5%	33.6%	66.6%	37.2%
OTHER SOURCES OF INCOME	19.8%	4.0%	3.9%	9.2%
SHIFT FROM FORMAL EMPLOYMENT TO SELF-EMPLOYMENT	9.5%	8.9%	0%	6.2%
GRAND TOTAL	100%	100%	100%	100%

Table 8: Safety net or alternative income sources developed

## SUPPORT NEEDED TO BOOST INCOME OR BUSINESS AFTER COVID-19

The majority (73%) of respondents reported needing access to lower interest loans ranging from 100,000–2,000,000 Ugandan shillings (\$27-542 USD) to revitalize their businesses and income. This was followed by the need for cash handouts or grants to businesses (18%), while 4% reported needing in-kind business support services and those with running loans expressed the need for loan rescheduling (3%).

Due to COVID-19, households lost income and depleted their savings, including use of business capital, to meet family expenses. Despite the high appetite to borrow, respondents reported that few or even none of the financial institutions were willing to extend credit due to the increased risk of default, resulting from a lack of savings to cushion borrowers and low business performance necessary to guarantee loan repayment.

## SUPPORT NEEDED TO BOOST HOUSEHOLD INCOME

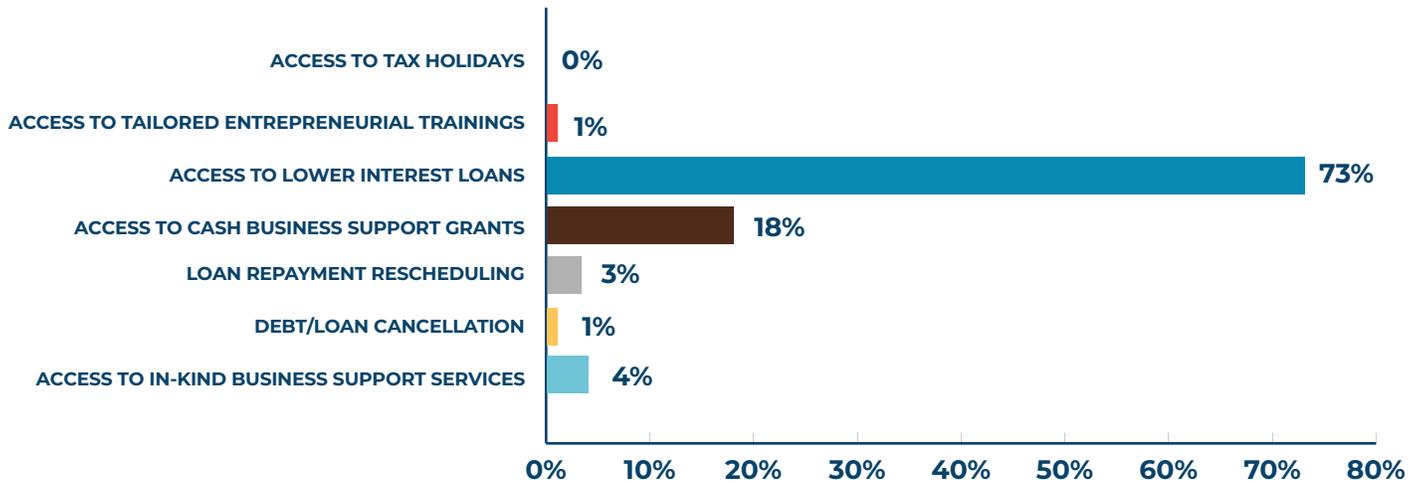


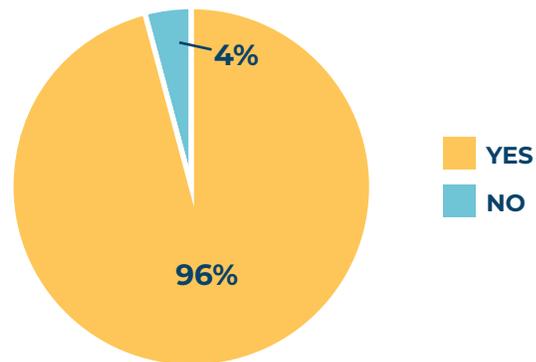
Table 9: Support needed to boost household income

## 2. EFFECT OF COVID-19 ON INFORMAL SAVINGS AND LENDING ASSOCIATION (ISLA) ACTIVITIES

Of the 448 farmers surveyed, the majority of respondents — 432 respondents or 96% — belong to a savings group or association, with only 16 respondents (4%) not belonging to any saving group or association.

BELONG TO ISLA BY PROJECT	COUNT
<b>NO</b>	<b>16</b>
ADAP	10
EF	6
<b>YES</b>	<b>432</b>
ADAP	30
EAYIP	291
JDDP	34
L4AB	51
EF	26
<b>GRAND TOTAL</b>	<b>448</b>

### BELONG TO SAVINGS GROUP/ASSOCIATION



## EFFECT OF COVID-19 ON GROUP SAVING ACTIVITIES

Of the 432 respondents who reported they belong to saving groups/associations, the majority (83%) reported that saving activities in their groups have either stopped or been slowed down due to COVID-19 restrictions. This has been experienced by the *Learn4Agribusiness* project (L4A) in the Northern region and EAYIP in the Central region, where groups stopped saving activities.

COVID EFFECT ON ISLA/BANK	CENTRAL	EASTERN	NORTHERN	GRAND TOTAL
DROP-OUT OF MEMBERS	2%	0%	0%	0.7%
<b>SLOWED DOWN SAVING ACTIVITIES</b>	<b>37.7%</b>	<b>59%</b>	<b>2%</b>	<b>32.9%</b>
STOPPED LENDING	14.6%	4%	0%	6.2%
CAUSED FORCED SHARE-OUT	0.4%	0%	0%	0%
HAMPERED LOAN REPAYMENT	1.2%	8%	3.9%	4.4%
SLOWED DOWN LENDING	3.2%	0%	0%	1.1%
<b>STOPPED SAVING ACTIVITIES</b>	<b>40.9%</b>	<b>29%</b>	<b>94.1%</b>	<b>54.7%</b>
GRAND TOTAL	100%	100%	100%	100%

Table 10: COVID-19 effect on ISLA activities

**EXAMPLE FROM EAYIP |** Fifty-four youth from the sample had taken loans from Post Bank and were finding it difficult to service the loans, so they opted for loan rescheduling. This was especially prevalent in Wakiso, Bugiri, Ngora and Amuria districts, with some struggling to pay after registering losses in broiler and egg sales in Wakiso. Uhunda women’s group sold 1.6 kg broiler chickens at 4,000 Ugandan shillings (\$1.10 USD) per bird, yet they were spending 10,000 Ugandan shillings (\$2.70 USD), resulting in a net loss of 6,000 Ugandan shillings (USD 1.60). The majority of the farmers do not have trucks to deliver produce or to get feed. “Like for me, I have to buy feed from Kampala every week, but it’s now impossible. The one I had stocked is getting finished,” poultry farmer Matovu said.

### 3. EFFECT OF COVID-19 ON FARM AND OFF-FARM PRODUCTION

Even though agricultural activities were not restricted by government during the COVID-19 lockdown, responses from the majority (71%) of farmers reveal that farmers had limited access to production inputs and that the price of production inputs increased by almost double. For instance, a kilo of poultry feed increased from 1,000 Ugandan shillings (27 cents USD) to 1,500 Ugandan shillings (40 cent USD), reflecting a 50% increase in price.

Sixty-six percent of farmers reported other COVID-19 effects on farm or off-farm production, including high transport costs due to the restrictions imposed on nonessential vehicles such as buses, minibuses and private cars, which would equally transport produce to and from the market before COVID-19. Furthermore, the increase in the cost of inputs was accelerated by the closure of some related business due to travel restrictions.

#### EFFECT ON COVID-19 ON FARM OR OFF-FARM PRODUCTION

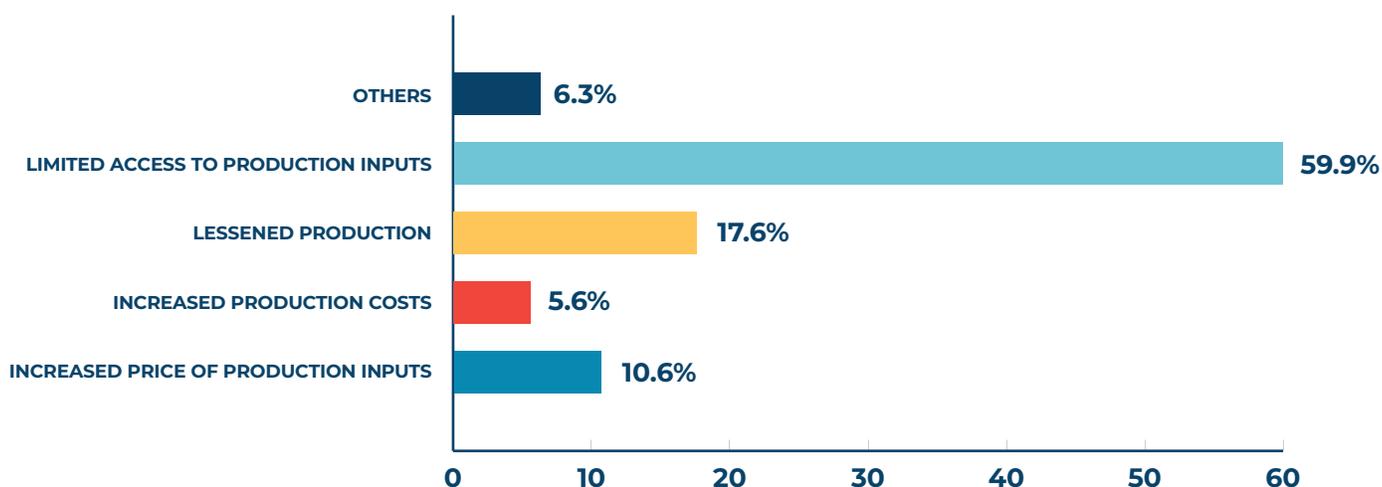


Figure 4: COVID-19 effect on farm or off-farm production

#### EFFECTS OF COVID-19 ON ACCESS TO MARKET

The majority (79%) of farmers experienced limited access to markets for their produce as the main challenge during COVID-19. This was attributed to restricted travels and closure of open markets<sup>1</sup>. For example, Bembe Youth Development Group, a poultry group in Katikamu Nyimba, had stocked 500 broilers but lost 1,680,000 Ugandan shillings (\$455.20 USD) from the sale of their chickens. This was due to the inability to access inputs and to the rise in the cost of inputs while the market for the mature birds was limited, as businesses such as restaurants and

<sup>1</sup>Open markets are designated places where buyers and sellers of goods meet for the purchase and sale of goods both agriculture and nonagriculture on a specific day per week.

hotels were closed, driving the prices for birds down. Pre-COVID-19, a 1 kg broiler bird would sell for 15,000 Ugandan shillings (\$4.10 USD), but during COVID-19 this reduced to 8,000 Ugandan shillings (\$2.20 USD).

## COVID-19 EFFECTS ON MARKET ACCESS

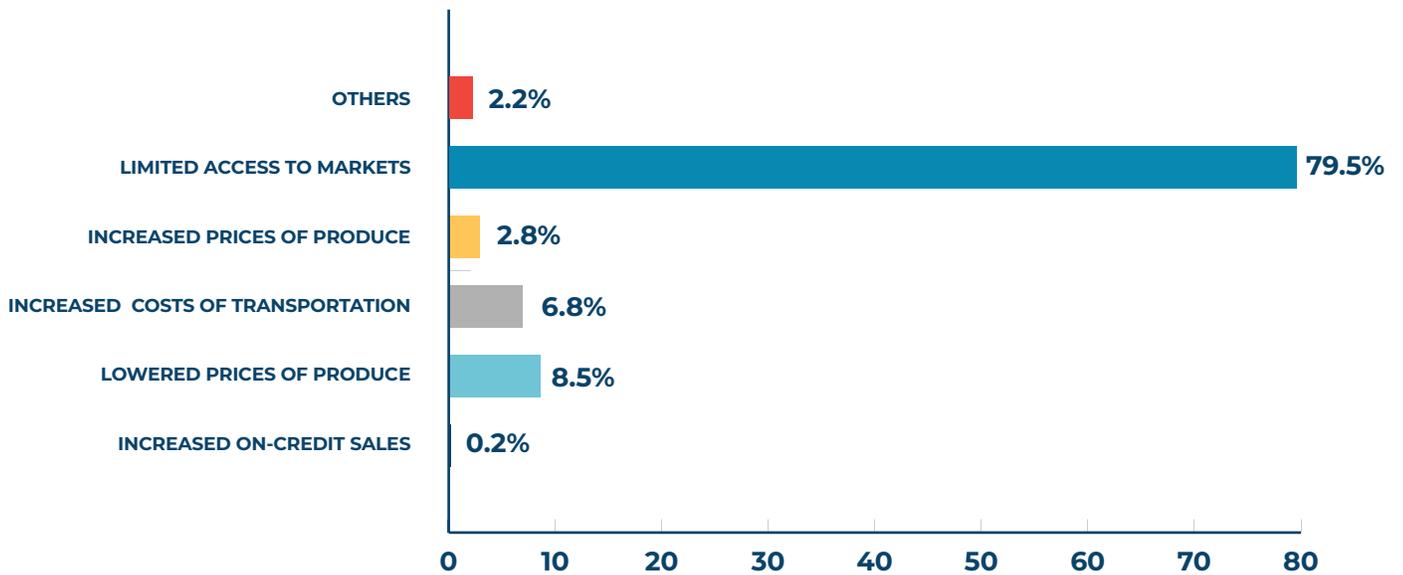


Figure 5: COVID-19 effects on market access



“The new disease (COVID-19) has affected my household in different ways. Generally, prices of some products such as salt have increased. I can no longer move easily to town to buy farm inputs as there are no means. I also can’t easily move my commodities to the market as I usually do. My group suspended group savings until the situation normalizes.”

**ABONGO BRENDA** – 26 years, Nenanyim youth group, Atali, Acan pii parish, Dokolo sub county

## 4. EFFECT OF COVID-19 ON ACCESS TO FOOD

### DECISION-MAKING ON TYPE OF FOOD TO BUY

While the majority (37%) of respondents indicated the male spouse makes most of the decisions on the type of food to eat, the results also show that 36% of respondent households make joint decisions. The children do not participate in decision-making. Before COVID-19, families reported that male spouses were much less involved in decision-making of what food to buy for the family. Due to reduced household incomes, men became more involved to determine the type of food that is cheaper and easily accessible.

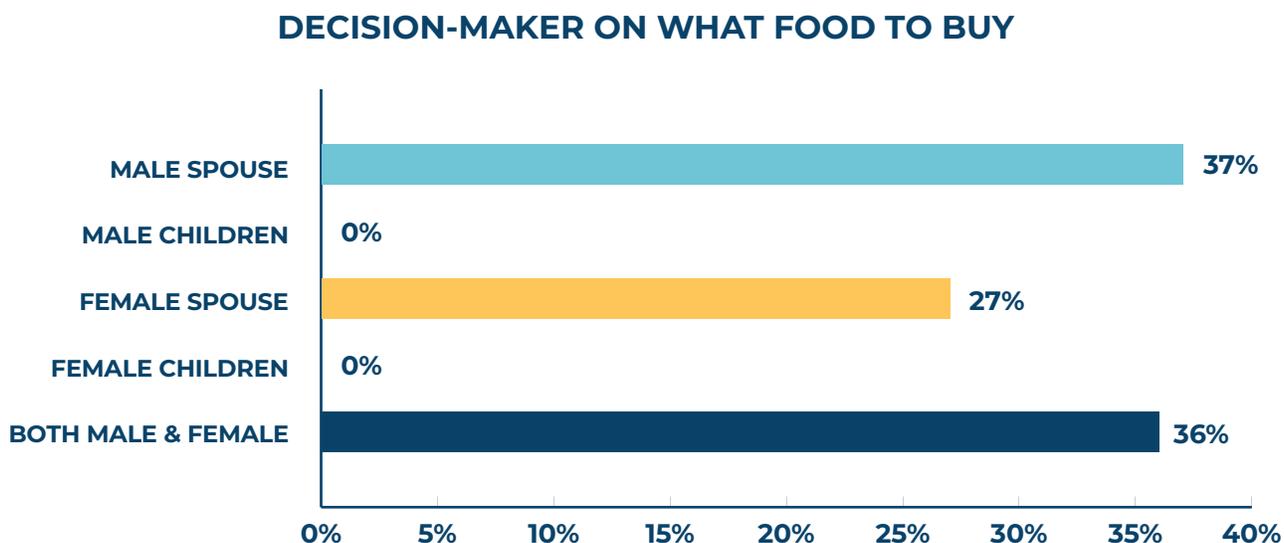


Figure 6: Decision-maker on type of food to buy

### NUMBER OF MEALS EATEN PER DAY

The data below shows the number of meals households were eating before COVID-19 and during the COVID-19 lockdown period. The majority (56%) of farmers eat two meals per day, with a significant 33% eating one meal per day. Deeper analysis shows that almost half (48%) of the households that previously ate more than three meals now eat two meals; 100% that ate one meal still eat one meal per day; 39% that ate two meals now eat one meal per day; and 62% that ate three meals now eat two meals per day.

NUMBER OF MEALS EATEN BEFORE COVID	NUMBER OF MEALS EATEN DURING COVID LOCKDOWN				
	1 MEAL	2 MEALS	3 MEALS	> 3 MEALS	GRAND TOTAL
1 MEAL PER DAY	100%	0%	0%	0%	100%
2 MEALS PER DAY	39%	61%	0%	0%	100%
3 MEALS PER DAY	26%	62%	12%	0%	100%
> 3 MEALS PER DAY	34%	48%	13%	5%	100%

Table 12: Meals eaten during COVID-19 lockdown

Further analysis shows that 40% of respondents have spent days without food due to decreased incomes and inability to sell their produce because of transport restrictions.

DAYS	COUNT	PERCENT
NO	268	60%
YES	180	40%
GRAND TOTAL	448	100%

Table 13: Day without food

## 5. EFFECT OF COVID-19 ON FAMILY DECISION-MAKING

Nearly half of all respondents reported that decisions about family income spending and resources are made by male spouses, followed by 34% reporting both male and female. Of respondents, 19% reported decisions made by female. Before COVID-19, joint decision-making about family income and other resources across the projects (EAYIP, L4AB and JDDP) was 56%, showing a reduction by 22% during the COVID-19 period.

## DECISION-MAKER ON FAMILY INCOME/RESOURCES

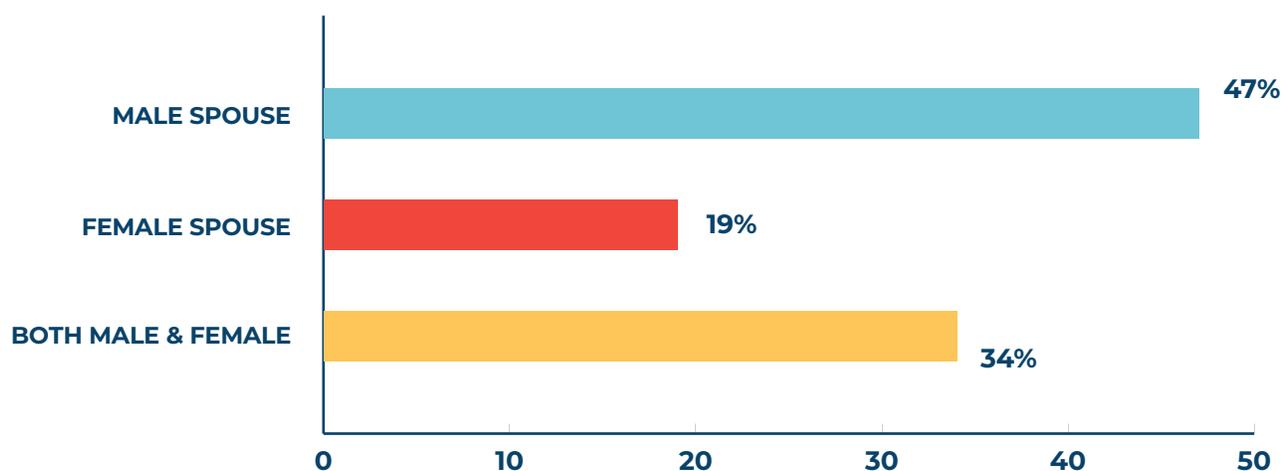


Figure 7: Who makes decision about family income and resources

## MAIN RESOURCES NOT ACCESSED AND CONTROLLED BY WOMEN BECAUSE OF COVID-19

The survey further sought to find which resources women lost and gained access to. The results show that the majority (54%) of respondents indicated that women did not lose access and control to any resource, followed by 32% reporting loss of access to household items like bicycles. Loss of access to land stands at 9%, with 5% reporting loss of access to utensils. Especially for Northern Uganda, loss of access to bicycles was attributed to restricted movement by other means of transport, such as motorcycles, so bicycles became the only possible means. With women having limited control and access to household assets, this was further aggravated by the prevailing circumstances. In addition, COVID-19 forced people to shift from small towns to rural areas to engage in farming as the only available business opportunity. This increased the demand for land for cultivation, hence raising the cost for hiring/leasing land. In general, women have limited control over land, and this control and access reduced further throughout COVID-19.

RESOURCES WOMEN LOST ACCESS TO	COUNT	PERCENT
ACCESS TO LAND	38	9%
UTENSILS	21	5%
ACCESS TO HOUSEHOLD ITEMS E.G. BICYCLE	131	32%
NONE	224	54%
GRAND TOTAL	414	100%

Table 14: Resources women lost access to

Regarding resources women gained access to, the majority of respondents (29%) revealed that women did not again access to any new resources, followed by 26% reporting gaining access to utensils, 25% reporting gaining access to household items like bicycles, and 20% reporting gaining access to land.

RESOURCES WOMEN GAINED ACCESS TO	COUNT	PERCENT
ACCESS TO LAND	83	20%
UTENSILS	109	26%
ACCESS TO HOUSEHOLD ITEMS E.G. BICYCLE	104	25%
<b>NONE</b>	<b>118</b>	<b>29%</b>
GRAND TOTAL	414	100%

Table 15: Resources women gained access to

## 6. EFFECT OF COVID-19 ON FAMILY RELATIONSHIPS

The findings revealed that 187 respondents (42%) experienced domestic violence or conflict during the COVID-19 period, while 58% reported no domestic violence or conflict experienced.

### HOUSEHOLD EXPERIENCED DOMESTIC VIOLENCE OR CONFLICT

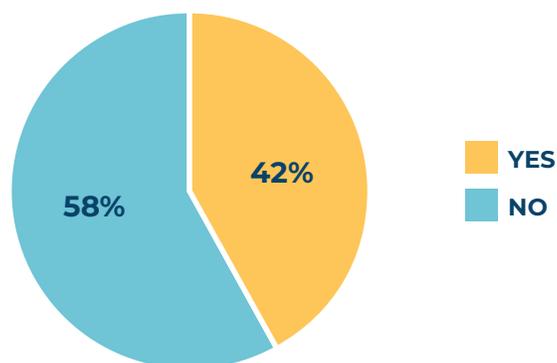
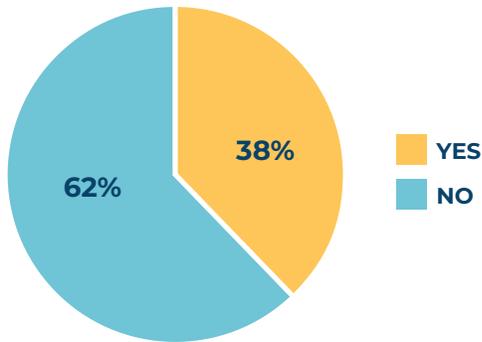


Figure 8: Household experienced domestic violence or conflict

## WHETHER FAMILY HAS RECEIVED FINANCIAL OR NONFINANCIAL SUPPORT FROM NEIGHBORS DURING THIS PERIOD

During COVID-19, 38% of respondents have received financial or nonfinancial support from their neighbors, whereas 58% of respondents have given financial or nonfinancial support to their neighbors.

HAVE YOU RECEIVED FINANCIAL OR NON-FINANCIAL SUPPORT FROM NEIGHBORS?



HAVE YOU GIVEN FINANCIAL OR NON-FINANCIAL SUPPORT TO NEIGHBORS?

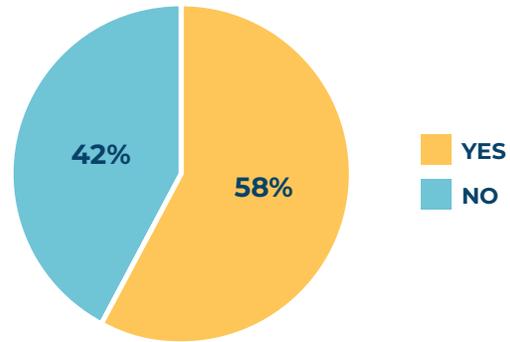


Figure 9 and 10: Received or given financial support to neighbors

## 7. EFFECT OF COVID-19 ON NATURAL RESOURCES

### NATURAL RESOURCES MOST DEGRADED DURING COVID-19

Sixty-nine percent of respondents reported cutting down trees to sell firewood and charcoal as it was the quickest alternative source of income to farming.

NATURAL RESOURCES DEGRADED MOST DURING COVID-19 PERIOD

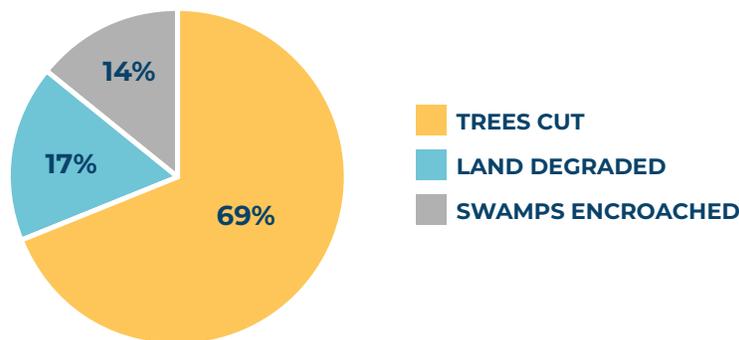


Figure 11: Natural resources degraded most

## 8. EFFECT OF COVID-19 ON FAMILY HYGIENE, SANITATION AND HEALTH

### HYGIENE AND SANITATION MEASURES ADOPTED DURING COVID-19

Handwashing is the most adopted practice, reported by 97% of respondents. This was followed by personal hygiene at 54% and compound cleaning at 47%. Other practices adopted include covering the mouth and nose using a face mask, maintaining social distance, use of sanitizers and avoiding sneezing and spitting in public places. The effect of adopting these practices has been two-fold. While adopting these practices has improved general community hygiene and reduced disease prevalence, it has also increased household expenditure.

HYGIENE AND SANITATION MEASURES ADOPTED DURING COVID-19 PERIOD

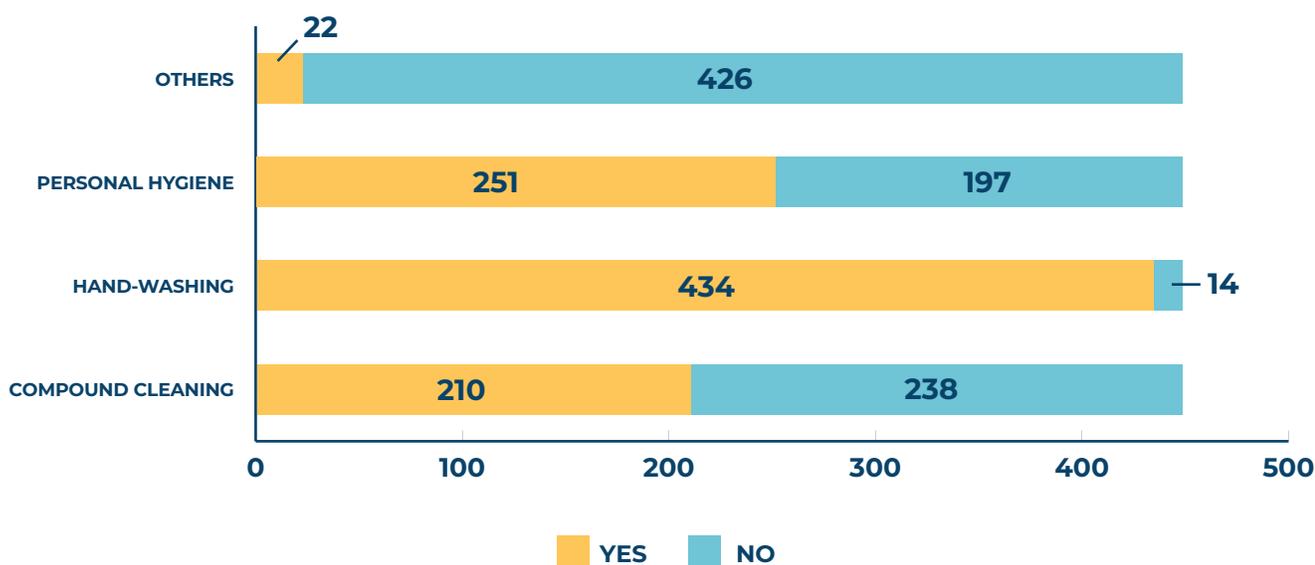


Figure 12: Hygiene and sanitation measures adopted during COVID-19

### HEALTH ISSUES THAT ESCALATED DURING COVID-19

Malaria-related cases were the most reported diseases during the COVID-19 lockdown, reported by 74% of respondents, followed by cough and flu at 50%, malnutrition at 31%, reproductive issues at 18%, and diarrhea at 14%. Other issues (4%) reported include headaches, ulcers, urinary tract infections and fatigue. While comparing this to before COVID-19, the study team confirmed with health officers that this aligns with the community's general health situation, as malaria, coughs and the flu are usually the most reported illnesses.

### WHAT HEALTH ISSUES ESCALATED DURING THIS PERIOD?

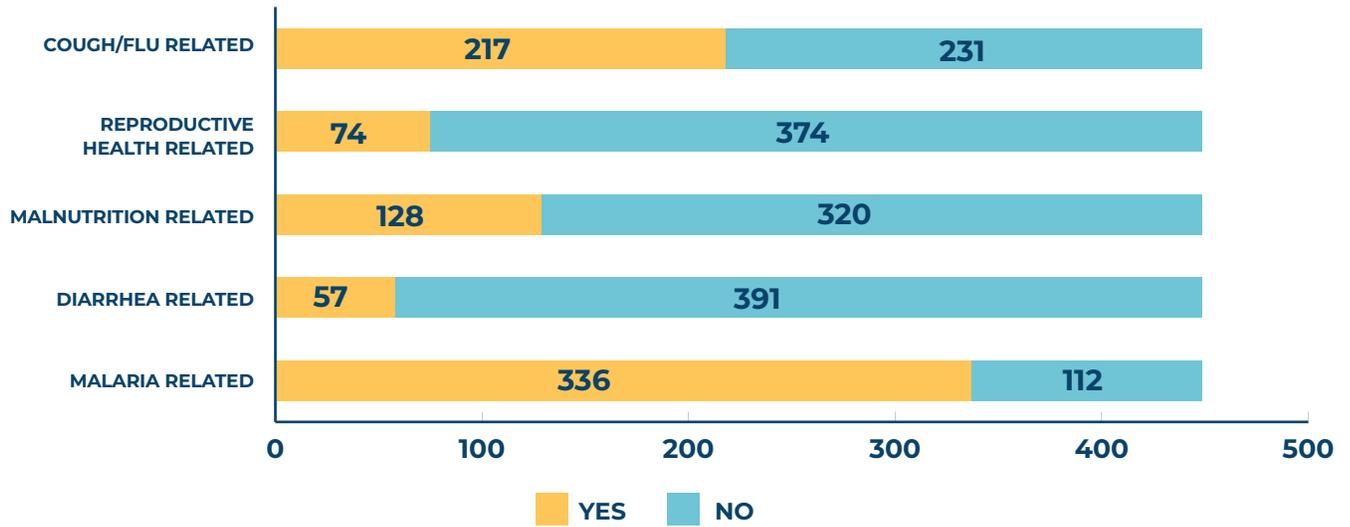


Figure 13: Health issues that escalated during COVID-19

### HOW HOUSEHOLDS RESPONDED TO HEALTH ISSUES

Going to a government health facility (64%) was the most reported action taken by households to address health issues, followed by going to private clinics (21%), use of home remedies and self-medication (7.5%). Further investigation indicated that despite inadequate health services, households preferred using government facilities, as limited income made it hard to afford private clinics. However, percentage usage of government facilities reduced further during COVID-19 because of travel restrictions and more families resorting to home remedies and self-medication. National statistics indicate an average of 75% of the population use government health facilities (Annual health sector performance report 2018).

### HOW DID YOUR HOUSEHOLD WORK ON THESE HEALTH ISSUES?

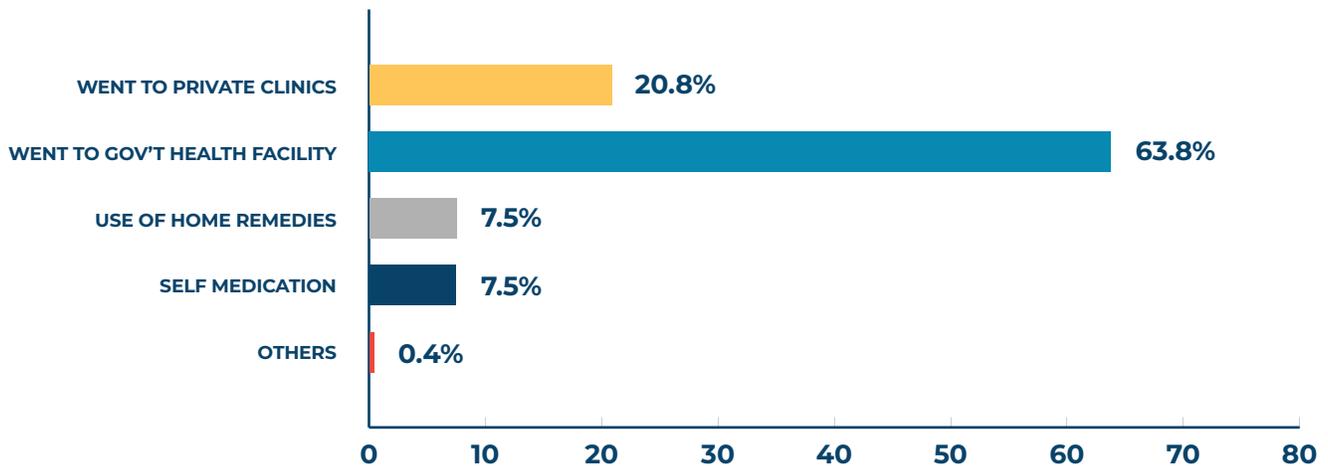


Figure 14: How household responded to health issues

# QUALITATIVE RESULTS

This section presents results from key informant interviews conducted for district officials in three districts; 10 agri-hubs under the *Accelerate Dairy Production and Productivity* project, *East Africa Youth Inclusion Program*, and *Learn4Agribusiness* project; and four private sector business companies operating in the Eastern, Central and Northern regions.

## 9. EFFECT OF COVID-19 ON AGRI-HUB OPERATIONS

To understand the effect of COVID-19 on agri-hub business performance and income, services to members, and relationship with partners, the research team interviewed the Board of Directors and management staff of 10 agri-hubs supported by Heifer Uganda. Findings from agri-hubs associated with dairy are presented separately from those associated with crop and produce.

### 9.1 AGRI-HUB BUSINESS PERFORMANCE AND INCOME

#### PRICE AND VOLUME OF MILK BULKED AND MARKETED BY DAIRY HUBS

The six agri-hubs that work with dairy are indicated in table 16. Overall, the average price of milk across the six hubs dropped from 758 Ugandan shillings (\$0.20 USD) for the processor/off-takers to 605 Ugandan shillings (\$0.16 USD) per liter of milk, leading to a 20% income reduction during the COVID-19 period. The decline resulted from fewer purchases by the processors due to reduced sales. The revenue was further affected due to increased expenses for protective measures put in place in response to COVID-19, such as procurement of handwashing facilities, sanitizers and face masks. Some hubs, like the Kiboga Livestock Board, decided to allocate 50 Ugandan shillings (\$0.014 USD) per liter of profit to support their farmers through sensitization on COVID-19 prevention and by placing handwashing facilities in strategic community areas.

NO.	AGRI-HUB	DISTRICT	PRICE OF MILK IN UGANDAN SHILLINGS				VOLUME OF MILK BULKED IN LITERS			
			BEFORE	CURRENT	DIFFERENCE	% REDUCTION	BEFORE	CURRENT	DIFFERENCE	% REDUCTION
1	Dwaniro Livestock Dairy Cooperative Society	Kiboga	850	650	200	24%	24,000	17,000	7,000	29%
2	Butemba Dairy Farmers' Cooperative Society	Kyankwanzi	800	650	150	19%	3,000	1,900	1,100	37%
3	Dwaniro Dairy Farmers' Association	Kiboga	650	500	150	23%	15,000	10,000	5,000	33%
4	Katuugo Dairy Farmers' Association	Kyankwanzi	700	630	70	10%	2,700	2,200	500	19%
5	Kiboga Livestock Dairy Cooperative Society	Kiboga	850	650	200	24%	18,000	12,000	6,000	33%
6	Kasejere Farmer Development Group	Kyankwanzi	700	550	150	21%	3,000	1,500	1,500	50%
AVERAGE			758	605	153	20%	10,950	7,433	3,517	32%

Table 16: Price and volume of milk bulked before and during COVID-19 period

Similarly, the average volume of milk bulked across the dairy hubs reduced from 10,950 to 7,433 liters per day, leading to a 32% reduction in the volumes bulked and marketed. Kasejere saw the biggest reduction in volumes bulked at a 50% reduction. Findings also show that the reduction in milk volumes has been caused by a number of factors such as:

- Increased competition among informal traders
- Increased consumption at home because of more family members staying home
- Farm production affected by torrential rains and floods
- Bad roads due to the rain
- Fresh milk market reduced, so processors raised the quality standard for yogurt and UHT milk
- The cutoff time to receive milk at collection centers moved from 10:30 a.m. to 9 a.m., taking an hour and a half off the drop-off window. Because of this, some of the farmers reduced the number of cows milked, and others could not make it to the collection centers within the new time period.
- Government started foot-and-mouth disease vaccination during the COVID-19 period, which also affected the milk volumes aggregated since certain milk producing areas in southwestern Uganda were put under quarantine.

## PRICE AND VOLUME OF PRODUCE BULKED AND MARKETED BY NONDAIRY HUBS

In the three nondairy hubs, the value and volume of produce bulked also dropped. One hub reported no wastage.

- **Katikamu Nyimbwa Multipurpose Youth Cooperative Society Limited**

Due to movement restrictions, most of the youth who had promised to deliver their maize produce at the hub were unable to do so. They estimated a loss of about 1.8 tons valued at 1,800,000 Ugandan shillings (\$487.80 USD), and the hub lost about 180,000 Ugandan shillings (\$48.78 USD) in commissions from this produce.

- **Zirobwe Kalagala Multipurpose Youth Cooperative Society Limited**

By the time of the lockdown, the hub had finished harvesting and bulking around 4 tons of maize from its members. Therefore, the quantity bulked was not affected. However, due to movement restrictions, the production committee was unable to manage the stored maize as required. The maize was infected by weevils, which lowered its quantity and quality. From the 4 tons bulked, the hub sold 3,300 kg, earning 2,640,000 Ugandan shillings (\$715.40 USD).

- **Amuria Farmers' Cooperative Society Limited**

Yogurt production was halted because the hub lost its milk supply during lockdown. Production of yogurt also reduced from 50 liters per day to 30 liters, leading to a reduction in income from 50,000 to 30,000 Ugandan shillings (\$14 to \$8 USD) per week. This loss of household income has led to backsliding in our project participants' progress toward achieving a living income. Further, the hub lost 77 packets valued at 77,000 Ugandan shillings (\$20.80 USD) due to spoilage, which was attributed to low consumer market. In addition, buying agro inputs from suppliers also ceased because the suppliers could not reach the hub. The number of people accessing the agro input services also reduced, dropping profits from 250,000 Ugandan shillings (\$67.70 USD) to only 15,000 Ugandan shillings (\$4.10 USD) for the three months of total lockdown. Police restricted the supervision of tractor hire services by the hub and the time for motorcycle transport was restricted to 2 p.m. Income from tractor hire services by the hub in Amuria services dropped from 4 million Ugandan shillings (\$1,084 USD) per month to 2 million Ugandan shillings (\$542 USD), giving an estimated loss of 2 million Ugandan shillings (\$542 USD).

## VOLUME AND VALUE OF PRODUCE WASTED

The table below summarizes the produce volume wasted at each agri-hub during the COVID-19 period, as well as the monetary loss. Two agri-hubs, Iwemba Kapyanga and Katikamu Nyimbwa Multipurpose Youth Cooperative Society Limited, did not report any wastage during the period. The rest (80%) did record losses resulting from produce wastage.

NO.	AGRI-HUB	DISTRICT	Produce	Unit	Quantity	Price in Ugandan shillings	Value in Ugandan shillings	Comment
1	Dwaniro Livestock Dairy Cooperative Society	Kiboga	Milk	Liters	31,000	650	20,150,000	Rejected by milk processor due to antibacterial residues and raised temperatures before the milk was received at the factory
2	Butemba Dairy Farmers Cooperative Society	Kyankwanzi	Milk	Liters	14,000	650	9,100,000	Rejected by milk processor and business closed the following day after government announced lockdown
3	Dwaniro Dairy Farmers' Association	Kiboga	Milk	Liters	5,000	500	2,500,000	One of the branches had a mechanical problem that couldn't be fixed by the technicians because they couldn't move due to lockdown
4	Katuugo Dairy Farmers' Association	Kyankwanzi	Milk	Liters	2,300	580	1,334,000	Rejected by milk processor due to quality issues and was sold in the local market at 50 Ugandan shillings less per liter
5	Kiboga Livestock Dairy Cooperative Society	Kiboga	Milk	Liters	17,000	850	14,450,000	One day's collection was wasted due to the closure of operations by milk processor the day following the government lockdown.
6	Kasejjere Farmer Development Group	Kyankwanzi	Milk	Liters	7,000	550	3,850,000	Two days of milk were wasted due to closure of operations by milk processor the day after announcement of the lock down.
7	Iwemba Kapyanga	Bugiri	Maize	Kilograms	-	-	-	No wastage reported
8	Katikamu Nyimbwa Multipurpose Youth Cooperative Society Limited	Luwero	Maize	Kilograms	-	-	-	No wastage reported because the hub continued drying the maize to prevent post-harvest losses and also treated the maize to eliminate storage pests.
9	Zirobwe Kalagala Multipurpose Youth Cooperative Society Limited	Luwero	Maize	Kilograms	700	800	560,000	The maize was affected by weevils, which lowered its quantity and quality
10	Amuria Farmers' Cooperative Society Limited	Amuria	Yogurt	Sackets	77	1,000	77,000	Losses due to low consumer market

Table 17: Volume and value of produced wasted by agri-hub

## 9.2 EFFECT OF COVID-19 ON DELIVERY SERVICES TO MEMBERS

### COMMON SERVICES OFFERED TO MEMBERS

All the agri-hubs offered more than three services to their members, including; veterinary extension (animal drugs, disease identification and treatment, trainings), financial services (loans, savings, financial literacy trainings), food (supply maize flour and beans), bulking, processing and marketing of the produce (fresh milk, yogurt, maize, etc.). The following services were most affected:

- Supply of the inputs like animal drugs and maize flour to farmers were delayed due to the movement restrictions, leading to stockouts. In addition, farmers/youth who would have been recommended by the extension staff to receive inputs were not reached and were not given inputs.
- Financial services were slowed down or stopped. For example, savings at the group level were greatly affected. Meeting restrictions prevented youth from conducting weekly saving meetings.
- Farmer trainings were suspended, and the cost of training less than five people became very expensive for the hubs in terms of transport costs and time.
- Drug supplies reduced because the suppliers required cash due to logistical challenges in transportation. For instance, in Gulu, extension services were suspended, and one farmer lost their cow due to limited access to extension.

### SUPPORT OFFERED TO MEMBERS BY AGRI-HUBS

In response to the COVID-19 effects on service delivery, agri-hubs were asked to mention the type of support they offered their members to help them cope. The following responses were provided across the agri-hubs.

- Dwaniro Livestock Dairy Cooperative Society supplied items such as food and animal drugs on credit to members regardless of whether the farmer has money or not. The hub also supported farmers to access printing services for education materials for their children free of charge, bought sanitary wear including masks worth 1,500,000 Ugandan shillings (\$406.50 USD) and distributed free of charge to farmers, hub staff and produce transporters.
- Some agri-hubs borrowed money to pay farmers for their milk that got spoiled. For example, the Butemba Dairy Farmers' Cooperative Society borrowed 9 million Ugandan shillings (\$2,439 USD) to distribute to farmers.
- For youth under EAYIP and running loans with Post Bank, their loans were rescheduled for an additional three months to enable farmers to use current funds during the lockdown and to encourage farmers to pay using mobile money or deposit their repayments at the nearest agri-hub branch.
- Groups were advised to have only the group chairperson, secretary and treasurer available at meetings to receive members savings one at a time. Group chairpersons also reminded

members to adhere to the Ministry of Health guidelines.

- Dokolo and Kwera Oil Seed Farmers' Cooperative delivered seed and other agri-inputs to members that were relatively close to the hub office. However, the hub could not transport the inputs to all members across the hub since this was not cost-effective given the quantities they were delivering.
- Dwaniro Livestock Dairy Cooperative Society and Kwera Young Farmers' Cooperative extended financial assistance to members to enable them to meet production costs.

## **COVID-19 EFFECT ON AGRI-HUB RELATIONSHIP WITH PARTNERS**

The study also sought to find out whether COVID-19 affected agri-hub relationships with their partners. All 10 agri-hubs reported that the pandemic had indeed affected their business relationships as highlighted below.

- Some input suppliers required cash payment, which agri-hubs were not able to provide. For example, Dwaniro Livestock Dairy Cooperative Society terminated their partnership with Eram veterinary company, Katuugo Dairy Farmers' Association stopped services from Boresha, and Amuria Farmers' Cooperative Society Limited lost milk suppliers for the production of yogurt.
- Farmers indicated that dairy processors cut milk prices per liter due to a decrease in demand for their products.
- The farmers at Dwaniro Dairy Farmers' Association stopped supplying milk due to a branch closure caused by a mechanical breakdown, as well as cancelled a veterinary drug supplier due to a lack of supply for the necessary drugs.
- There were delays in signing memorandums of understanding (MOUs). For example, Katikamu Nyimbwa Multipurpose Youth Cooperative Society Limited was not able to sign MOUs with three partners since they could not meet to negotiate the terms. The three partners are Ugachick Luwero, Sharovet and Mayirikiti Piggery Farm.

## **BUSINESS ADJUSTMENTS AND PLANS**

This section spells out the business adjustments by agri-hubs considered important to their partners and Heifer. The adjustments are informed by the social distancing guidelines limiting farmer trainings, low purchasing power and low processing capacity. The following responses were generated.

- Three of the six dairy agri-hubs revealed plans to increase milk bulking capacity, including Katuugo Dairy Farmers' Association from 3,000 to 6,500, Dwaniro Livestock Dairy Cooperative Society from 21,000 liters to 40,000 liters and Kasejere Farmer Development Group from 3,000 to 6,500 liters per day. Due to COVID-19, the transport system was affected, and most farmers could not easily deliver the right volumes and quality of milk on time. This affected the processors' quality of milk products on market and as a result, cooperatives experienced more rejects. To solve this challenge, cooperatives are working on plans to set additional milk collection satellite centers to reduce the distance and time taken by farmers to deliver milk. This is expected to improve quality and increase the quantity of milk bulked by the cooperatives.

- Three agri-hubs, Butemba Dairy Farmers' Cooperative Society, Katuugo Dairy Farmers' Association, and Kasejere Farmer Development Group, indicated plans of starting drug shops.
- Four agri-hubs plan to use more online services, mobile money services and become bank agents. These are Butemba Dairy Farmers' Cooperative Society, Dwaniro Dairy Farmers' Association, Katuugo Dairy Farmers' Association and Kiboga Livestock Dairy Cooperative Society.
- Four agri-hubs plan to start, strengthen or expand members' savings in their Savings and Credit Cooperative Societies (SACCOs). These are Butemba Dairy Farmers' Cooperative Society, Dwaniro Dairy Farmers' Association, Ziobwe Kalagala Multipurpose Youth Cooperative Society Limited and Kasejere Farmer Development Group.
- Two agri-hubs plan to diversify their income sources. Iwemba Kapyanga intends to open a stationery store and Amuria Farmers' Cooperative Society Limited intends to delve into rice production.

## 10. EFFECT OF COVID-19 ON PRIVATE SECTOR OPERATIONS

Four private sector companies were interviewed to get a deeper understanding of the COVID-19 effect on their business performance, relationship with the farmers, influence on their current plans and their short/long-term plans of serving their customers better. The companies partnering with Heifer across different projects included AGRIBUTE<sup>2</sup> under EAYIP, JESA Farm<sup>3</sup> under ADAP, Ngetta Tropical Holdings<sup>4</sup> and TRAFORD Uganda LTD<sup>5</sup> under the L4A. The findings are presented per question below.

### 10.1 EFFECTS OF COVID-19 ON BUSINESS PERFORMANCES

- In general, COVID-19 has had negative effects on the private sector business operations. Physical staff mobility and transfer of essential information to clients, both farmers and service providers has been affected. At one milk processor, about 50% of the operation staff were sent on paid leave and staff work is alternated to ensure social distancing. At AGRIBUTE, trainings at the institute and at outreach training centers were all halted, including training for EAYIP youth in Ngora district. "At Ngetta, an activity that we would carry out within one day has to be broken maybe to a week since we attend to individual or small group of about five members. This, to be honest, has and will have an impact in our production value chain." Denis Oriokot, Agricultural Extension Officer, reported.
- Company sales have reduced. For example, TRAFORD reported that their sales reduced by about 70%. The company is now aiming to have transactions that sustain staff and some few essential services to keep the company in constant connection with its clients for future transactions. At Ngetta, seed sales to walk-ins at the factory went down due to the ban on

<sup>2</sup> AGRIBUTE is training youth in piggery production and management in Eastern Uganda under EAYIP

<sup>3</sup> JESA Farm is an implementing partner on the ADAP project, focusing as an off-taker and providing technical support on milk quality and bulking.

<sup>4</sup> Ngetta Tropical Holdings provides access to quality seeds and is an off-taker for sunflower grain. Has partnership contracts with Heifer-supported youth farmer cooperatives in Dokolo Northern Uganda under L4A project

<sup>5</sup> TRAFORD Uganda LTD provides access to quality seeds and is an off-taker for soybean grain. Has partnership contracts with Heifer-supported youth farmer cooperatives in Dokolo Northern Uganda under L4A project

public transport and because organized farmer groups cannot afford the price of the seeds due to the situation at hand. In addition, Virgin cooking oil sales, a product of Ngetta, have gone down due to a lower income base of the consumers.

- Failure to meet the company targets was also cited as a key challenge. At TRAFORD, the company is unable to meet the projected season one tonnage of buying 1,000 metric tons of soybeans from farmers. This might not be possible, since some projects such as the Amuria EAYIP project are likely not to be implemented as earlier planned. The company has only engaged about half of its targets. At one milk processor, over 50% of the business operations may get disrupted if the trend continues at this current rate. The uptake of milk has been reduced to 50%, and demand has reduced to almost half, prompting reduction in the supplies from the factory and, consequently, the uptake from the farmers. At AGRIBUTEK, engagement with more than two-thirds of their farmers has been temporarily suspended, leading to a failure to achieve targets for the year. In addition, their resource mobilization plan has been scattered by COVID-19.
- Loan repayment schedules have been disrupted, mainly due to low sales. This has led to advisory board committees for some companies to meet and design new strategies for debt payment with their financial providers. At TRAFORD, the company supplied grain on debt to their customers who are currently unable to pay back because their sources of income are currently limited due to COVID-19.
- One positive outcome is companies have learned to adopt technology in transferring data and information to clients through online applications such as Zoom and Skype, which are cheap and time-saving. They hope to keep using such platforms for meetings and workshops.

## 10.2 INFLUENCE OF COVID-19 ON CURRENT AND FUTURE ENGAGEMENT WITH FARMERS

COVID-19 is affecting current engagement with the farmers since most companies can only continue engaging a very small number of farmers because of proximity and resource constraints. The future is still not clear for AGRIBUTEK. They hope they can quickly get to a new normal situation. However, they plan to develop more model farmers to be used as their referrals should uncertain times continue. Or they may need to mentor farmers to fit into the new normal situation.

- **Promotion of information and communications technology (ICT) in agriculture**

At TRAFORD, they reported that the future looks bright as the company is adopting new technologies, such as online reporting on inputs data, trainings and other services offered to farmers. “New applications have been adopted for reporting that will help us directly supervise field activities on a daily basis. We hope to engage more farmers next season, as this season is acting as a basis for next season’s decision-making,” John Tusasirwe, chief executive officer, stated. Similarly, AGRIBUTEK is carrying out a campaign on the integration of ICT in agriculture with the hope that farmers appreciate the evolving trends and quickly cope. This shall give support on how they will continue to engage with farmers even in hard situations. JESA is also considering adopting more and frequent use of electronic media to expand extension services and other communications to farmers.

- **Sustainability of both the company and the farmers**

With the lockdown, some farmers have engaged in agricultural activities. Some organized farmer groups have accessed sunflower seeds from Ngetta Tropical Holdings for planting. This gives them hope of getting grain from farmers after harvest because the stores are empty and yet they need the grains for continuous processing of cooking oil. Through the partnership with the *Learn4Agribusiness* project, Ngetta views this partnership as a stepping-stone for current and future engagement with farmers since the farmers who received seeds are under production.

- **Farmer capacity building programs like farmer trainings, exchange visits and on-farm visits**

Extension follow-up visits at the farm level have been significantly scaled down. In addition, they state that their supply contracts will be affected since the commitments on volumes to be supplied will reduce. This is based on the reductions along the supply chain.

## 10.3 SHORT-TERM OR MEDIUM-TERM ADJUSTMENTS BY PRIVATE SECTOR BUSINESS COMPANIES

### AGRIBUTEC

- Scaling up engagements with development partners to give support to farmers
- Increased training on value addition and food security to farmers
- Training farmers on production of high value crop to increase household incomes
- Writing proposals to attract funding to support farmers

### TRAFORD

- Adjusting to embrace technology
- Be robust in implementation of planned activities
- Work on respecting timelines, because delays usually affect service delivery to both the private company in terms of company and partners reputation in society and output
- Medium-term: designing new changes in the way services are delivered to their clients, such as restructuring of company services and having new products added in the market (to be communicated when compete)

### NGETTA

- Strengthen engagement with lead farmers to help in member sensitization
- Assess and monitor members to ensure high productivity with the help of community facilitators
- Will carry out farm visits to specific farmers, with challenges identified by lead farmers, farmer group leaders and community facilitators.
- Will carry out small group assessment meetings with farmers, especially farmer group leaders, but not more than five

## JESA

- Created a crisis response team to facilitate the open and consistent flow of accurate information between key stakeholders, maintaining stakeholder confidence and informing customers who will be impacted
- Established a team to focus on supply chain assessment and risk management. This team will work to reconfigure global and regional supply chain flows (input and the output side), where possible, utilizing alternative modes of transportation and conducting trade-offs according to needs, cost, service and risk scenario analysis of all viable options
- Mapped criticality of sourced materials to high-value products and revenue streams. Identified the components and raw materials that have the highest impact on revenue streams, helping to ensure scarce capacity is allocated wisely
- Reviewed contracts with key customers and suppliers to understand liability in the event of supply shortage
- Determined exposure by identifying current and buffer inventory (alternative sources of inputs and services), building tier-transparency and short-term action plans.
- Conducted a value chain assessment of other risk factors that may escalate costs (i.e. transportation shortages may increase cost as transport companies see an opportunity to raise margins) and impact service and inventory capabilities, taking proactive action to address anticipated shortages, such as possibly pre-booking freight) and intensification of online orders, procurements and payments of goods and services

## 11. EFFECT OF COVID-19 ON PUBLIC SECTOR OPERATIONS

We reached out to three district local governments (Bugiri, Luwero and Wakiso) for the COVID-19 impact assessment with the aim of understanding the effects on the pandemic on the government operations, primarily the services offered to smallholder farmers. The key areas of focus were effect of COVID-19 on service delivery to farmers by the districts, which services were affected most and how the districts are supporting the farmers to cope with the pandemic effects.

### 11.1 EFFECT OF COVID-19 ON DISTRICT SERVICE DELIVERY TO FARMERS

- In Bugiri district (reported by commercial officer), the presidential directive of banning public services has limited the number of district staff offering services to the community. Only critical staff are allowed in offices. In addition, the district staff are not allowed to organize large-scale meetings in the communities and collecting data and information from the community is difficult because some district staff do not have vehicles, face masks and sanitizer, which hinders farmer engagement.
- Similarly, in Luwero district, information flow to the farmers has been affected because extension staff have not been able to reach out to the farmers due to restriction of use of public means. Some district staff in the extension service delivery department do not have

transport to offer farmers support in the field. The district was not able to distribute inputs to farmers under the Operation Wealth Creation program, so most farmers did not access planting materials for this season.

- In Wakiso district, the district extension staff also cannot move to communities to support farmers because of the ban on public transport. The pandemic has instilled fear among farmers. Even when they are invited in the required numbers of five for trainings, few turn up. This is affecting the flow of information to farmers. As in Luwero, the Operation Wealth Creation program did not distribute planting materials to farmers, which may affect the production for this season.

## 11.2 SERVICES AFFECTED MOST

Across the three districts, the following services have been affected most: education services, extension services, small-scale businesses, cooperatives, transport, regional markets for farmers' produce like Busia and Mbale have closed, programs like Operation Wealth Creation program and Youth Livelihood Program have slowed implementation.

## 11.3 DISTRICT STRATEGY TO SUPPORT FARMERS TO COPE WITH THE COVID-19 AND POST COVID-19 SITUATION

- In Bugiri district, the district COVID-19 taskforce has allowed some low-level engagement with farmers. Agriculture extension officers and commercial officers are now allowed to offer extension that does not require engagement with so many people. The district is encouraging cooperatives to remain open but limit the number of people who are served at a given time, and farm inputs and stores have remained opened.
- In Luwero district, the district task force is currently conducting an evaluation to assess the impact of COVID-19 on all sectors. The results will inform the district on further planning. The district has emergency support to offer individuals affected by COVID-19, such as distribution of food relief.
- In Wakiso district, the COVID-19 task force is mobilizing stakeholders/NGOS working in the district to access communities and give support. During the lockdown, the district COVID-19 task force also issued movement permits to enable some key individuals/agencies to move and support some sectors. The Operation Wealth Creation program is also starting to get closer to the farmers distributing planting materials.

## 12. STRATEGIES ADOPTED BY PROJECTS IN RESPONSE TO COVID-19

### 12.1 LEARN4AGRIBUSINESS (L4A)

Heifer Uganda and Edukans are implementing a three-year project titled *Learn4Agribusiness* in Dokolo district. The project focuses on four major crop value chains: soya beans, maize, sunflowers and groundnuts. The project aims to enable 3,200 uneducated young people between 18–30 years to earn a decent income to support themselves and their families. The project focuses on skills enhancement among youth in the areas of production, processing and marketing practices of the four value chain crops, as well as soft skills using a market systems approach. In response to COVID-19, the project has adopted the following strategies:

- Conducting a series of radio talk shows covering the following areas: coping with stress and anxiety, domestic violence, staying healthy and responsible, teenage pregnancies and sexually transmitted infections, and preparation for post COVID-19 recovery. The broadcasts are conducted at Dokolo FM with a potential reach to seven districts in the region. The feedback from the call-in sessions shows that the talk shows were relevant in building resilience and giving young people renewed hope to cope with the effects of the pandemic.
- Utilizing a WhatsApp group already in existence prior to COVID-19 to coordinate field level activities. This group has membership of six CAEs, 12 community facilitators and three core project staff. Here, teams post pictures of project work (such as evidence of youth planting) and other updates in real time (such as COVID-19 guidelines, new security measures and how the community is responding).
- Project structures of community facilitators have been co-opted on the sub-county COVID-19 committees due to their close engagement with communities to provide updates to and from communities about COVID-19. The project continues to work closely with the Dokolo district COVID-19 task force, both at district and sub-county levels, to enforce COVID-19 guidelines during trainings and distribution of items such as seeds and aggregation of produce. The task force provides technical staff to monitor activities for compliance to handwashing and social distancing guidelines.
- The project has procured personal protective equipment (PPE), including face masks, gloves for community facilitators and detergents. As a community contribution, the hubs provide hand-washing facilities (buckets with taps and water) during activities of seed distribution. The project is considering procuring PPE for some Farmer Field School facilitators.

### 12.2 JANNAI DIARY DEVELOPMENT PILOT PROJECT (JDDP)

The *Jinnai Dairy Development Pilot* project (JDDP II) is a three year (2019–2022) dairy agribusiness value chain project implemented in partnership with the Japanese International Cooperation Foundation (JICF) in Gulu district. The project aims at transforming the lives of smallholder farmers in Gulu District through affordable micro-leasing schemes by 2022 by building their capacities

through market-led production and collective bulking and marketing of milk. The project focuses on improving production and productivity through increased access to quality breeds, feeds and water, as well as animal health care services. The project is responding to COVID-19 through:

- Integrating financial literacy trainings into livestock trainings to provide knowledge and skills on financial management including financial planning, budget, and savings. This is intended to support families to make informed financial decisions within the available resources
- Instituting standard operative procedures at hub offices, including handwashing facilities, social distancing during team meetings and observing the travel guidelines during field activities
- Engaging with the Micro Finance Support Center to reschedule the loans due to reduced incomes

## 12.3 EAST AFRICA YOUTH INCLUSION PROGRAM (EAYIP)

Heifer is implementing the *East Africa Youth Inclusion Program (EAYIP)*, a five-year program (2016–2021) funded by Mastercard Foundation (MCF) and Heifer International. The project aims to improve the livelihoods of 25,000 young people in Tanzania and Uganda. The program will create employment and enterprise development opportunities in the dairy sector and other agricultural value chains for youth aged 15–24 years. In Uganda, the program targets 15,000 economically disadvantaged youth directly and an anticipated 45,000 youth indirectly through creation of jobs and entrepreneurship opportunities by the end of the five years. The COVID-19 response strategies are:

- The project is pursuing income diversification on other short-term income-generating activities. Following the closure of some businesses, especially the nonagricultural products and services, the project is providing support to youth to venture into new business and diversify income sources. Some youth have ventured into production of essential goods such as masks and soap, which are demanded by the communities.
- Reduction in income sources affected loan repayment. The project engaged with Post Bank Uganda to extend the terms of loan repayments and rescheduled the youth loans that had been affected by the pandemic.
- In year five, the project will integrate vegetables into the project as a livelihood and food security intervention. This will involve sensitizing participants on food security and nutrition, as well as setting up demonstrations.
- The project will introduce digital saving technology to ISLA groups to link them with Post Bank. This will allow people to continue saving despite other controls, like social distancing, as well as improve the safety of their funds.

## 13. CONCLUSIONS AND RECOMMENDATIONS

### BOOSTING FARMER INCOMES

- The majority of respondents derive their incomes and livelihoods from crop production, followed by business, retail and livestock. Programs should put emphasis on improving crop and livestock related production and productivity among the target communities, as well as improving business skills among farmers. This would ensure that farmers' return from these sectors are maximized for better livelihoods.
- Of respondents, 89% reported a reduction in income due to COVID-19 related lockdowns. This indicates a negative effect on the livelihoods of households and a decline in Heifer International's efforts to close the living income gap. Hence, it is important for programs to prioritize interventions that will help households regain business momentum and recover from the shock in the short and medium terms.
- Notably, there is a section of households that lost all their sources of income. Such households are characterized as urban or semi-urban dwellers, particularly women and youth living in rented housing and surviving on daily earnings from small businesses such as retail shops, food vending, craft making, etc., which were completely closed during COVID-19. We also noticed that some respondents in this category were servicing loans from microfinance Institutions (MFIs) and saving groups. Due to the total lockdown, such households lost 100% of their livelihoods and could only survive on limited food aid from government, neighbors, friends and relatives. Therefore, specific assessments should be done on different categories of the target communities to offer tailor-made and specific support based on degree of effect by COVID-19.
- It should be noted that the majority of respondents had their incomes fall below 100,000 Ugandan shillings (\$27 USD).
- To cope with the effects of COVID-19 on their incomes, the majority of respondents resorted to surviving on past savings and borrowing from other people. This has a direct negative effect on their reinvestment potential, as their reserves are depleted yet they are increasing the burden of servicing the debts accumulated. Therefore, we should consider supporting agri-enterprises with affordable financing to elevate them from this financial hole and bounce back to normal business. This resonates with many respondents, as access to lower interest loans was selected as the support most needed to boost their businesses and incomes post COVID-19.

### ALTERNATIVE SOCIAL SAFETY NETS

- While considering alternative social safety nets or income sources, the majority of respondents reported having changed or switched to different income-generating activities. This calls for diversification in livelihood programming.
- A significant proportion of respondents (24%), especially young people, resorted to offering casual labor within their local communities. Developing skills for work within the informal sector would help build competitiveness among target groups to maximize the benefit of informal labor markets. It should be noted that the past savings, which offered a survival base to the majority of respondents during COVID-19, was generated from the informal savings and loans associations cultivated by program interventions. However, 83% of respondents reported that their informal savings and loans activities were either halted

or slowed down due to COVID-19. This poses a considerable threat to such an important resilience mechanism. It is important to strengthen ISLAs using creative approaches that can enable activities to continue during similar crises. This may include but is not limited to the use of mobile and online savings and lending platforms.

## BOOSTING FARM PRODUCTION

- The most pronounced effect of COVID-19 on farm production was access to production inputs even when there were no official restrictions on agriculture. The survey indicates that the challenge was contributed to by the fact that dependable production input outlets are far from the localities of the program target communities. Support geared toward making these nearer and accessible to the local communities is vital to ensure continuity of farm production and productivity during crises.
- The majority of respondents reported limited access to markets due to COVID-19. This came with losses to many small-scale businesses run by the majority of program participants. It is important to popularize the market systems development approach, which can enable target participants to build sustainable relationships with market players to cushion themselves against adverse effects of such crises.

## FOOD, NUTRITION AND HEALTH

- COVID-19 influenced the feeding and nutrition of households. The majority had to reduce the number of meals per day, many from three or more meals to one or two meals per day. The survey found that 47% of households went without a meal for at least one day, which is a direct effect of the decline in incomes. Therefore, programming should include food security as a vital component.
- Of respondents, 97% reported adopting proper hand-washing practices as a positive health practice. This should be upheld through programs since it also has a ripple effect on preventing other life-threatening health conditions.
- Other health issues also appeared during this COVID-19 crisis, such as malaria, coughs and malnutrition. Having a portion of health-related messages entwined in program interventions is worthwhile.

## DOMESTIC VIOLENCE AND CONFLICTS

- Amid the COVID-19 crisis emerged cases of domestic violence, as depicted by the 44% of respondents who reported having experienced some form of domestic violence during this period. Household level advocacy, sensitizations and gender mainstreaming is an important consideration in programming.
- Many respondents were supported through financial and nonfinancial assistance from neighbors and friends. This can be attributed to our training and development model, which emphasizes community and supporting one's neighbors. This should be strengthened and incorporated into all aspects of programming.

## ENVIRONMENT MANAGEMENT AND PROTECTION

- Looking at the environment, the majority of respondents indicated tree degradation during COVID-19. This was mainly due to the search for fuel. Programming should incorporate environmental protection interventions such as focus on smart energy technologies that could also double as income-generating avenues for the target participants.

## PRIVATE SECTOR BUSINESS PERFORMANCE

- Private sector businesses were affected in several ways, one being shrinking markets. This affected their purchasing power and ability to offer good prices to local farmers and failure to meet the requirements of their clients. The need to build and strengthen farmer producer organizations and functional relationships with larger federations may be instrumental in presenting shared remedies to manage common business crises.
- Embracing available technologies to deliver some program interventions that minimize physical human interaction has become increasingly important, and programs should endeavor to do so appropriately.

## ANNEX 1: LIST OF PEOPLE INTERVIEWED

NO.	AGRI-HUB	DISTRICT	NAME	DESIGNATION
1	Dwaniro Livestock Dairy Cooperative Society	Kiboga	Asiimwe Sharlif	Manager
2	Butemba Dairy Farmers' Cooperative Society	Kyankwanzi	Mbanza James	BOD chairperson
3	Dwaniro Dairy Farmers' Association	Kiboga	Mugisha Richard	Manager
4	Katuugo Dairy Farmers' Association	Kyankwanzi	Barigye Geoffrey	Manager
5	Kiboga Livestock Dairy Cooperative Society	Kiboga	Tugume Wilbert	Manager
6	Kasejere Farmer Development Group	Kyankwanzi	Kabandize Erias	BOD chairperson
7	Iwemba Kapyanga	Bugiri	Ziraba Fred	Manager
8	Katikamu Nyimbwa Multipurpose Youth Cooperative Society Limited	Luwero	Thembo Eric	Manager
9	Zirobwe Kalagala Multipurpose Youth Cooperative Society Limited	Luwero	Mubiru Gustine	BOD chairperson
10	Amuria Farmers' Cooperative Society Limited	Amuria	Olado John	Manager

NO.	PRIVATE SECTOR COMPANY	DISTRICT	NAME	DESIGNATION
1	Agributech	Serere	Okiring Arnold	Principal
2	JESA Farm Dairy Limited	Wakiso/Kiboga	Turyahikayo Silver	Extension and milk procurement manager
3	Traford	Amuria/Dokolo	John Tusasirwe	Chief executive officer
4	Ngetta Tropical Holdings Limited	Dokolo	Denis Oriokot	Agricultural extension officer

NO.	DISTRICT	DEPARTMENT	NAME	DESIGNATION
1	Luwero	Community	Butono Martha	Youth officer
2	Bugiri	Production	Kabera Julius	Commercial officer
3	Wakiso	Community	Kyejusa John	District community development officer

