

# USAID Growth through Nutrition

## Most Vulnerable Households 2020 Follow-Up Survey Results

April 2020

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## ACRONYMS

AEW	Agriculture Extension Worker
AGP	Agriculture Growth Program
CDDS	Child Dietary Diversity Scores
DA	Development Agents
EBF	Exclusive Breastfeeding
ENGINE	Empowering New Generations to Improve Nutrition and Economic Opportunities
GOE	Government of Ethiopia
GtN	Growth through Nutrition
HEW	Health Extension Worker
HH	Households
HHS	Household Hunger Scale
IYCF	Infant and young child feeding
LES	Livelihood and economic opportunities
MAD	Minimum Acceptable Diet
MCHN	Maternal Child Health and Nutrition
MDD	Minimum Dietary Diversity
MDD-W	Minimum Dietary Diversity - Women
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MEAL	Monitoring, Evaluation Accountability and Learning
MMF	Minimum Meal Frequency
MVHHs	Most Vulnerable Households
SBCC	Social and Behavior Change Communication
SNNP	Southern Nations, Nationalities and People's Region
SPSS	Statistical Package for Social Sciences
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene
WDDS	Women's Dietary Diversity Score

## Acknowledgements

The survey team would like to express its gratitude to the Woreda Health, Agriculture, and Administration Offices for their facilitation and permission to conduct the survey in each woreda. Special thanks go to all participants who generously responded to the lengthy interviews. Without their kind participation, this study would not have been possible. The survey team would like to thank the Growth through Nutrition team for leading and coordinating the fieldwork in each region.

## Disclaimer

This report is made possible by the support of the American people through the U.S. Agency for International Development (USAID) under Agreement No AID-663-A-16-00007. The contents of this

document are the sole responsibility of Save the Children and the Growth through Nutrition Activity and do not necessarily reflect the views of USAID or the United States Government.

## EXECUTIVE SUMMARY

Feed the Future Ethiopia Growth through Nutrition Activity, United States Agency for International Development's (USAID's) flagship multi-sectoral nutrition and Water, Sanitation and Hygiene (WASH) project is implemented in 102 woredas in four regions (Amhara, Oromia, Southern Nations, Nationalities, and Peoples Region (SNNPR) and Tigray) of Ethiopia. The primary objective of this five-year (2016-2021) project is to improve the nutritional status of women and young children in Ethiopia's four productive regions, focusing on the first 1000 days (from the start of pregnancy until the child's second birthday).

Over the course of implementation, Growth through Nutrition conducts annual surveys among supported Most Vulnerable Households (MVHH) to assess the changes brought about by the interventions targeting MVHHs, to inform project implementation and to monitor changes in households over time. The project previously conducted a baseline study in 2017 and subsequent follow-up survey in 2018. In February 2020, the second follow-up study was conducted among a two cohorts of Growth through Nutrition MVHHs across 25 woredas in Amhara, Oromia, SNNP and Tigray regions. Cohort 1 consisted of 319 MVHHs from the previous two surveys and Cohort 2 consisted of 337 MVHHs from kebeles that directly neighbor the kebeles sampled in Cohort 1, for a total of 656 MVHHs surveyed in 2020.

As presented in the Table 1 below, in 2020, 9.8% of all sampled households reported no income in the past year (12.5% among Cohort 1 households only), increasing from 2.2% in 2018. There was an increase in the proportion of households that reported earning income from production supported by the project, which increased from 64% in 2018 to 83% of all households in 2020 (82% among Cohort 1 only). The proportion of households reporting moderate or severe hunger in the past month substantially decreased from 29% in 2017 to 10% in 2020 (11% among Cohort 1 only).

The percent of households in Cohort 1 with a handwashing facility at home significantly increased ( $p<0.001$ ) from 14% in 2018 to 31% in 2020. The proportion of households that reported washing hands with at least soap or ash/endod remained relatively similar to 2018, at 60%. The proportion of households who practice all five critical handwashing moments increased from 16% in 2018 to 23% in 2020.

Among children aged 6–23 months, the proportion of those who consumed a minimum of four-food groups or more out of seven per day thus fulfilled minimum dietary diversity, increased significantly to 34% in 2020 ( $p<0.001$ ) and the proportion of children aged 6-23 months who met the minimal acceptable diet significantly increased ( $p<0.001$ ) from 12% in 2017 to 30.7% in 2020.

The proportion of women of reproductive age who had adequate dietary diversity, consuming five or more of the 10 food groups was 2.0% in 2018 and significantly increased ( $p<0.001$ ) to 16% among Cohort 1 households. Additionally, the proportion of women who reported making joint decisions with their spouse on household expenditures increased from baseline, increasing from 55% to 70% among Cohort 1 households.

The prevalence of Iron and Folic Acid supplementation intake for at least three months among women who were pregnant in the past 2 years prior to the assessment decreased from 41% in 2018 to 27% in 2020.

**Table I: Summary Table for Growth through Nutrition Most Vulnerable Households 2017 Baseline, 2018 and 2020 Follow-Up Surveys key output & and outcome level indicators**

<u>Indicators</u>	<u>2017</u>	<u>2018</u>	<u>2020</u> <u>All</u>	<u>2020</u> <u>Cohort 1 Only</u>
Percentage of households reporting no income in past year	11.7% (45/386)	2.2% (8/357)	9.8% (64/656)	12.5% (40/319)
Percentage earning income from production supported by project	1.8% (7/386)	64.1% (229/357)	83.4% (547/656)	81.8% (261/319)
Percentage of households that experienced moderate or severe hunger in the past 30 days	29.0%	33.9%	9.0%	10.7%
Percent of MVHHs having hand washing facility at home	2% (8/386)	14% (51)	28% (184/656)	30.7% (98/319)
Percentage of washing hands with soap / ash/'endod' and water most of the time	55.1% (211/383)	61.1% (218/357)	59.7% (391/655)	56% (178/319)
Percent who practice all 5 critical hand washing moments	17.6% (68/386)	15.8% (61/357)	23.1% (151/655)	23.8% (76/319)
% of children with minimum dietary diversity (4 food groups or more for children 6 to 23 months)	12.4% (25/201)	18.9% (28/140)	33.7% (34/101)	N/A
% of children (6-23 months) who have minimal acceptable diet	11.9% (24/201)	37.9% (53/140)	30.7% (31/101)	N/A
% of women with minimum dietary diversity (5 food groups or more)	2.4% (9/386)	2.0% (7/354)	17.9% (115/643)	16% (49/307)
% of women who receive iron and folic acid supplementation for at least 3 months during pregnancy	32.5% 68/209	40.6% 52/128	26.8% (42/157)	28.2% (20/71)
% of female respondents who report practicing joint decision making with their spouse on decisions related to household income expenditures	55.2% (213/386)	61.9% (219/354)	69.1% (453/656)	69.6% (222/319)

Overall, the findings from this follow up survey showed that livelihood interventions combined with SBCC activities and exposure to program activities has a positive effect on some of the key

individual and household level nutritional outcomes. Though the effect of individual SBCC or livelihood activities on key behaviors was statistically insignificant, the reported behavior change indicates that some combination of exposure to the program has a positive influence. In some key behaviors, there are slight decreasing trends, which may reveal select geographic areas where targeted coaching and support to MVHHs could be strengthened. Counseling and SBCC during pregnancy, for example, are opportunities to identify households that may require more targeted support to improve exclusive breastfeeding rates, dietary diversity, and IFA supplementation.

## BACKGROUND

Save the Children International (SCI) in collaboration with the Government of Ethiopia (GOE) leads the implementation of Growth through Nutrition Activity, multi-sectoral nutrition and WASH project funded by the U.S. Agency for International Development (USAID). Growth through Nutrition supports country-led policies, programs, strategies, and institutions building the capacity of local partners. Activities are implemented at the woreda and kebele levels and target 102 woredas that are home to an estimated 14 million people in the regions of Amhara, Oromia, Tigray, and Southern Nations, Nationalities, and People (SNNP) in Ethiopia.

The Growth through Nutrition activity emanates from the Empowering New Generations to Improve Nutrition and Economic opportunities (ENGINE) project to improve the nutritional status of women and young children, with the core initiative of preventing undernutrition during the first 1,000 days, from the start of pregnancy until the child's second birthday. Growth through Nutrition invests in agriculture, health and WASH activities to address gaps in the availability of nutritious and productive varieties of vegetables, fruits, legumes, bio-fortified crops and small livestock, increase nutrition specific intervention utilization and support better use of inputs and cultivation practices, to increase market availability of diverse foods, and the supply of WASH products and services needed to reduce and prevent stunting. Primarily the government frontline agriculture extension workers through the agricultural extension system at the grassroots level implement activities.

### Description of the MVHH Intervention

Most vulnerable households (MVHHs) are defined by the Activity as the “poorest of the poor households who encounter difficulties in obtaining the basic supplies required to meet basic needs due to insufficient resources and or other livelihood conditions.” Growth through Nutrition aims to enhancing the nutritional status of children and women by improving dietary diversity of women and ensuring a minimum acceptable diet for children at household level. It places emphasis on the production, postharvest handling, promotion and consumption of nutrient-dense vegetables, fruits, animal source foods, and improved agricultural practices. Over the life of the project, 28,000 most vulnerable households (MVHHs) will be reached with direct support in acquiring startup inputs of packages of nutrition sensitive agriculture. To date, the project has provided livelihood support to 24,768 MVHHs in all implementation regions

The nutrition-sensitive livelihood strengthening approach enables the poor to save money & access credit and leads to increased household food production and income generation that ultimately aims to increase diversified food availability, access to markets, and asset accumulation. This further enables MVHHs to diversify their diets through increased purchase of diversified foods throughout the year, and to invest more in their livelihoods, ensuring the long-term sustainability of diversified food production and consumption. There is evidence that agricultural diversification can enhance dietary diversity – both directly through consumption of

#### Summary of livelihood intervention package provided to each MVHH

- 2 female sheep for sheep rearing; or 2 female goats for goat rearing;
- 6 chickens total (5 pullets and 1 cockerel of two -month-old chicken)
- 3 basic hand tools for homestead garden cultivation
- 5 fruit seedlings
- Vegetable seed in gram depending on the plot size

foods produced, and indirectly, by increasing the purchasing power of poor households through increased incomes (Canadian Journal of Development Studies 35(2):211-227 May 2014).

## MVHH ELIGIBILITY CRITERIA

The table below lists the criteria used in Growth through Nutrition to identify the MVHHs “poorest of the poor households” at kebele (lowest administrative unit in Ethiopia) levels who encounter difficulties in obtaining the basic supplies required to meet basic needs due to insufficient resources and or other conditions. If a household within Growth through Nutrition Activity’s target area met one or more of these criteria, they were included in the MVHH cohort study.

**Table 2. Targeting criteria for MVHHs.**

Targeting Criteria
Household should be member of the community/kebele*
Female headed household (receive priority)
Economically Poor household with above three months of food gap*
Households with children less than 2 years of age*
Pregnant woman and lactating mother*
Household who do have plot of land for on-farm activities. For homestead gardening and grazing land for animals
Disabled person who do have family labor
Willing to be organized in a saving group, regularly save and attend enhanced community conversation (ECC)
Landless households willing to engage in off-farm activities
Physically able to do on-farm activities, and willing to construct separate room for animals and have the capacity to manage animals
Household who did not receive support from INGOs/NGO/donor

\*mandatory criteria to qualify for project support.

## PROBLEM STATEMENT

Most people suffering from chronic malnutrition in developing countries, including Ethiopia, are among the poorest of the poor and lack access to dietary diversity and food rich in micronutrients on a regular basis (FAO, 2013). They largely depend on high amounts of cheaper staple starchy foods that do not provide the required amounts of macro- and micronutrients needed for proper health and development (HarvestPlus, 2012). Studies have shown that low dietary diversity is associated with stunting (Black et al. 2008). Previous surveys conducted in the Amhara, Oromia, SNNP and Tigray regions by ENGINE and Growth through Nutrition revealed that fruit, vegetable and animal source food consumption is the lowest among rural communities in the Growth through Nutrition project implementation sites in Ethiopia. Vegetables are however an excellent source for overcoming micronutrient deficiencies that can serve as a source of income providing smallholder farmers with more jobs per hectare than staple crops (Englberger et al., 2010). It is with this rationale that Growth through Nutrition invests and promotes nutrition sensitive agriculture and water, sanitation, and hygiene (WASH) activities to address gaps in the availability of nutritious and productive varieties of vegetables, fruits, legumes and small livestock in local markets as well as supports improved agriculture cultivation practices. Growth through Nutrition has been supporting



select households and farmers across the Amhara, Oromia, SNNP, and Tigray regions since 2017 through the provision of supplies and equipment and technical educational sessions delivered by Agriculture Extension Workers and Health Extension Workers. To assess the project's progress in supporting households and improving their agricultural and nutritional outcomes, Growth through Nutrition conducts an annual household survey of MVHHs.

## STUDY OVERVIEW

The purpose of the annual MVHH panel survey is to assess selected process and outcome indicators on a regular basis, to provide information on project implementation and to allow tracking of changes in households over time. In 2017, the baseline MVHH assessment was conducted among a cohort of 386 Growth through Nutrition MVHHs found in targeted 25 woredas in Amhara, Oromia, SNNP and Tigray regions. In 2018 and 2020, follow-up surveys were conducted among this cohort of MVHHs and will be repeated annually so that data can be monitored and triangulated with routine data and qualitative studies to identify the factors leading to or preventing successful adoption of key behaviors and outcomes. In 2020, in order to obtain an appropriate sample size of households with children under 2 years of age, the survey collected data from the original cohort from the previous surveys, of which 319 MVHHs participated, and an additional new cohort of 337 MVHHs from kebeles that neighbor the kebeles that were sampled in the first cohort, for a total of 656 MVHHs surveyed. The households sampled for the second cohort are MVHHs who have been receiving support from the project for the same duration of time as the MVHHs from Cohort 1, and are in kebeles neighboring the kebeles of MVHHs from Cohort 1 so their demographic profiles would be comparable. The data collected during the MVHH surveys is supplementary to data collected through the project's baseline survey, post agricultural input distribution monitoring surveys, existing M&E tools and systems, additional qualitative case studies, and the planned end line survey of the Growth through Nutrition activity. The data from the 2020 survey was analyzed and compared to the previous surveys to compare progress and identify areas that show successful or unsuccessful adoption of key outcome indicators.

The study therefore, was conducted with the following objectives:

## OBJECTIVES AND RESEARCH QUESTIONS

### Specific objectives

1. Assess nutrition practices among participants / MVHHs of *Growth through Nutrition* project activities
2. Investigate proportional association of improvements in nutrition practices as the result of exposure or participation in Growth through Nutrition project activities
3. Examine the relationship between gains in household income and nutrition practices (income and expenditure)

4. Explore factors associated with success and or failure of nutrition practice among project participants.<sup>1</sup>

### **Research Questions: The MVHH surveys aims to answer:**

1. Does participation in the Growth through Nutrition Activity interventions lead to improved nutrition practices among MVHHs?
2. To what degree is exposure or participation in Growth through Nutrition Activity interventions associated with improvements in nutrition and WASH practices?
3. What is the relationship between gains in MVHH's income and nutrition practices?
4. To what degree do household-level outputs and outcomes improve over a 3-year period and, if so, how much and for which MVHHs?
5. To what degree do individual-level outputs and outcomes improve over a 3-year period and, if so, how much and for which MVHH individuals?

## **APPROACH AND METHODOLOGY**

A cohort panel study was conducted among rural MVHHs participating in the Growth through Nutrition project in targeted woredas with two cohorts. Participating households were assigned a unique identification number for the duration of the study. MVHHs from the baseline and 2018 survey cohort were interviewed and, as much as possible, enumerators interviewed the same respondent in each MVHH during each year of data collection. Due to various implementation constraints, the study in 2020 was conducted in February, while previous surveys were conducted in September and October of 2017 and 2018 respectively. In 2020, 319 MVHHs from the first cohort were interviewed in addition to 337 MVHHs who were interviewed for the first time as part of a second cohort. The goal of this method is to monitor the same households each year and, as much possible, interview the same respondent each year as well. In order to gather data about individual-level outcomes among children under 2 years of age, a second cohort of households was included in the study to account for children aging in the first cohort. This second cohort may be followed again during subsequent follow-up studies, helping the project to track progress of households over the duration of the implementation period and identify “less” and “more” successful households who can inform project adaptations that may be considered to help the project achieve its outcomes. The methodology and sampling procedures followed for the baseline and 2018 follow up survey were described in an earlier report, available elsewhere.

### **Sampling Procedure and Sample Size**

Since this is a household study, the sampling frame includes the total population of 4000 Year I MVHHs, across 250 kebeles, where each Kebele has 16 MVHHs. To obtain a sample with 95%

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<sup>1</sup> Due to the COVID19 pandemic and resulting social distancing measures enforced in 2020, the planned qualitative study to answer this objective was postponed until research activities can be resumed. This report does not include any findings to address this objective.

level of confidence and +/- 5% margin of error, a sample of 400 MVHHs were selected for the new study cohort (“Cohort 2”) during the 2020 follow-up survey and they were selected from an equal number of kebeles that neighbor kebeles, from the same woredas previously selected from the first cohort (“Cohort 1”), in order to include comparable households to those from the previous surveys. The representation of each woreda in Cohort 1 and Cohort 2 are described in Table 3 below.

**Table 3. Sample Size of MVHHs by Region, Woreda, % of Sample and Population in Growth through Nutrition Project Area.**

Number of MVHHs per Region & Woreda					Study Representation			
Region	Woreda	2017 (Cohort 1)	2018 (Cohort 1)	2020 (Cohort 1 + Cohort 2)	2017 (Cohort 1) (N=386)	2018 (Cohort 1) (N=357)	2020 ( Cohort 1 + Cohort 2) ( N=656)	Overall % of MVHH population (N=4000)
Amhara	Alefa	16	16	32	24%	25%	26%	24%
	Ankasha	16	16	29				
	Debre Elias	30	26	51				
	Dejen	16	15	29				
	Takusa	16	15	26				
	<b>Sub-Total</b>	94	88	167				
Oromia	Agarfa	14	14	28	39%	40%	37%	40%
	Becho	16	16	25				
	Diga	32	32	56				
	Gasara	16	14	27				
	Girar Jarso	11	9	22				
	Horo	16	16	N/A*				
	Wara Jarso	14	12	26				
	Wonchi	16	16	31				
	Yaya Gulale	15	15	29				
	<b>Sub-Total</b>	150	144	244				
SNNP	Bulle	16	16	31	24%	22%	25%	24%
	Gedeb	16	2	26				
	Gumer	15	14	25				
	Malga	15	14	26				

	Misrak Azerenet	16	16	28				
	South Ari	16	15	28				
	<b>Sub-Total</b>	<b>94</b>	<b>77</b>	<b>164</b>				
Tigray	Bulle	16	16	31	12%	13%	12%	12%
	Enda Moheni	16	16	23				
	Tahtay Koraro	16	16	27				
	<b>Sub-Total</b>	<b>48</b>	<b>48</b>	<b>81</b>				
<b>Total</b>	<b>25</b>	<b>386</b>	<b>357</b>	<b>656</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
*Data not collected in Horo due to inaccessibility related to security concerns.								

### Outcome Monitoring Among MVHHs

Three levels of outcomes were monitored and tracked among the MVHH cohort over the years: 1) household, 2) child, and 3) pregnant or lactating women, women in the reproductive age group. Within each of these levels, a set of primary outcomes were monitored and tracked.

Household-Level Outcomes – primarily, three household level outcomes were monitored and tracked:

1. **Household income** – this is measured by a) the proportion of households reporting an income from one or more sources; b) the total income amount from all sources; c) the mean household income for those household reporting an income; and d) the percentage of total household income accounted for by sales of project related inputs.
2. **Household hunger** – this is an indicator to monitor food insecurity in a community by measuring household hunger, specifically on the quantity of food access, rather than dietary quality. The indicator is a composite scale that measures how often households experience food deprivation over a period of 30 days with 3 main focus areas: 1) food deprivation due to lack of resources to get food; 2) going to sleep hungry due to lack of food; and 3) going a whole day and night without eating due to lack of food.
3. **Households applying proper hand washing (based on interview and observation by enumerators)** – this is measured by: a) the presence of hand washing stations in the household; b) the presence of water and soap/any other detergent; and c) reported household hand washing practices at critical times.

Child-Level Outcomes – primarily, four child-level outcome will be monitored and tracked by the panel study:

1. **Mean number of food groups consumed from 7 food groups** (children from 6 – 23 months of age) – this is measured using USAID’s “*Indicators for assessing infant and young child feeding practices, PART II Measurement*” (2010) in which mothers report whether her child has

consumed 17 different types of foods in the previous day that are then aggregated into seven (7) broad food groups.

2. **Minimum diet diversity** – this is measured as a binary variable that indicates whether or not children 6 – 23 months have consumed from 4 or more food groups in the previous day.
3. **Minimum meal frequency** – for breastfed children 6–23 months of age, this is measured by mothers reporting whether her child received solid, semi-solid or soft foods the minimum number of times (determined by their age) during the previous day. For non-breastfed children 6–23 months of age, this is measured by mothers reporting whether her child consumed solid, semi-solid or soft foods or milk feeds the minimum number of times or more during the previous day.
4. **Minimal acceptable diet** – for breastfed children 6–23 months of age this is measured by mothers reporting whether her child consumed at least the minimum dietary diversity and the minimum meal frequency during the previous day. For non-breastfed children 6–23 months of age, this is measured by mothers reporting whether her child consumed at least 2 milk feedings and had at least the minimum dietary diversity, not including milk feeds, and the minimum meal frequency during the previous day.

Women-Level Outcomes – primarily, five women-level outcomes will be monitored and tracked:

1. **Mean food groups consumed from 10 food groups** – this is measured using USAID’s FANTA III (2016) Minimum Diet Diversity for Women. Women report whether they have consumed 19 different types of foods in the previous day. These foods are then aggregated into 10 food groups.
2. **Minimum diet diversity** – this is measured by whether or not the woman consumed 5 or more food groups in the previous day.
3. **Iron and folic acid supplementation** - this indicator measures women, confirmed to have been pregnant in the last 2 years, who took iron and folic acid for more than 3 months during pregnancy.
4. **Women’s workload** – these indicators measure the average number of hours women spend generating income and doing household and childcare-related work.
5. **Women’s decision-making** – these indicators measure how household decisions made on household income expenditures and food purchases & food preparation/consumption.

### **Data Collection and data assurance**

A pretested questionnaire, used in previous surveys, was used to collect data at the household level. Trained data collectors and supervisors (two data collectors and one supervisor) deployed in each region and walked from house to house with the assistance of a community guide. Data was collected via tablets using ODK software and KoBo Toolbox. During data collection, supervisors and regional MEAL managers closely monitored the data collection team to ensure their adherence to the study protocol. Besides, the country office MEAL team checked all the data submissions from the field on a weekly basis. The Growth through Nutrition MEAL team supervised data entry and cleaning prior to analysis. SCUS’s Senior Advisor, Research, M&E conducted the data analysis using SPSS.

## Data Analysis

Growth through Nutrition's MEAL team supervised data entry and cleaning prior to analysis. The analysis, conducted with SPSS software, used descriptive techniques and, statistical tests (i.e. chi-square, McNemar's test, and t-tests) tests to assess level of significance in changes for select nutritional outcome indicators of interest between baseline and follow-up assessments, thus, findings are reported in descriptive percentages, means, sum-totals and p-values, where appropriate. As the sample in 2020 was comprised of a combination of both Cohort 1 and Cohort 2, and was therefore both dependent and independent of the sample from baseline, different statistical tests were applied during data analysis, depending on the indicator. For most indicators, statistical analysis was conducted comparing only Cohort 1 data in 2020 to baseline data, in order to assess changes within the same households. A p-value less than 0.05 was considered statistically significant.

### *Ethical Considerations*

Ethical approval was obtained from SCUS' Ethics Review Committee. Prior to data collection, the data collection team conducted briefings with woreda authorities and respective kebele and village leaders on the objectives of the study to obtain oral consent to perform the survey in each locality. Informed consent was obtained from all respondents and data collectors assured respondents of confidentiality of data and privacy. Consent from respondents was obtained verbally and data were registered and stored anonymously, and the questionnaire was administered in a confidential way.

## RESULTS

### Household Characteristics

During the 2020 follow-up survey, 319 households from Cohort 1 and 337 households from the new cohort (Cohort 2) were interviewed. The sociodemographic characteristics of households from both cohorts were similar (*See Annex Tale 19 for details*). The average household size in Cohort 1 was 5.5 members and in Cohort 2 was 5.2 members. Compared to 2018, the proportion of households in Cohort 1 comprised of married couples decreased from 85% to 80% and the proportion of households with pregnant or lactating women decreased from 67% to 47%. The proportion of households in Cohort 1 with children less than 2 years of age was 25%, as children from previous surveys had aged out. In the new cohort, Cohort 2, the proportion of households with married couples was 84%, households with pregnant or lactating women was 47%, and households with children less than 2 years of age was 24%.

Almost all respondents live in houses with walls made of mud and wood, 89% and 87% of households in Cohort 1 and Cohort 2 respectively, and roofing made of corrugated iron sheets (60% of Cohort 1 and 54% of Cohort 2) or thatch of grass or leaves (37% of Cohort 1 and 42% of Cohort 2). The majority of households own a plot of land for on-farm activities, 92% of Cohort 1 and 94% of Cohort 2, and approximately 84% of all respondents produce vegetables and 64% raise livestock on their land. Farming is the main source of income for 86% of households and 43% of

households across both cohorts reported being able to cover their own household food consumption from their own income or production in the past year, increasing from 28% in 2018.

Compared to baseline and 2018, fewer households reported being unable to cover their household's food consumption from their own income in 2020, decreasing from 72% in 2018 to 57% of households in both cohorts. Among the households that were unable to cover their own food consumption from their own income for at least one month, the mean number of months they experienced a food gap was 3.5 months, which has not changed since baseline. The months during the previous year in which most of the households experienced a food gap were July (39%), August (43%), and September (36%). The months when the smallest percentage of households reported experiencing a food gap were January (3%), February (2%), and March (3%).

### **Respondent Characteristics**

Almost all respondents (94%) interviewed among both cohorts in this survey were women who ranged from 18 to 55 years of age, with a mean age of 32 years. Similar to previous years, the majority of respondents (78%) were married to the head of the household, had no education (61%), and most of the women (93%) responded that they were physically able to do physical labor. The demography of respondents was similar across both cohorts, indicating that the selected sample of MVHHs in both cohorts are comparable.

### **Growth through Nutrition's Interventions for MVHHs**

Growth through Nutrition aims to reach up to 28,000 MVHHs across five regions with a package of nutrition and livelihood support to improve intake of nutritious foods and dietary diversity at household level. The support consists of the provision of productive animals such as sheep, goats, and chicken; seeds of specific vegetables and fruit seedlings selected based on their nutritional values; and basic hand tools for cultivation of homestead gardening. The primary aim of the package is to improve household dietary diversity of women and children and ensure a minimum acceptable diet for children, and income generated from the sale of surplus that would create a prospect to access additional nutritious food items from the local market. The livelihood support provided to MVHHs is accompanied by technical capacity building for production, consumption, and promotion of nutrient-dense vegetables, fruits, animal source foods, and improved nutrition sensitive agricultural practices at household levels. The household management of support provided by the project and nutritional effect of intervention is monitored through this follow-up survey and results are provided in below subsequent sections.

### **Livestock Support**

**Chickens** – In 2020, approximately two-thirds of households (68%) owned chickens obtained from the project and 33% owned chickens obtained from other sources. In total, across the whole sample, households owned 2,479 chickens that were obtained from the project and other sources, or about 4 chickens per household. The percent of households with chicken provided by the project and the number of chickens owned, on average per household, decreased since 2018, indicating

that MVHHs have either sold chickens or the chickens died in the last year, as there was an increase in income generated from livestock and few families reported consuming chicken meat.

Sheep – In 2020, 12% of households owned sheep from other sources and 66% of all households (69% of Cohort 1 only) owned sheep provided by the project, decreasing from 84% in 2018. In total, households owned 1,849 sheep and Cohort 1 alone owned 855 sheep, an increase from 2018. Thus, while the percent of households that own sheep decreased, households that do own sheep seem to own more sheep than in previous years, showing that select households are successfully raising livestock and see value in raising sheep. This is supported by responses that indicate increased income from and consumption of dairy products. Sheep provide not only meat for the MVHHs but also milk in some woredas and non-food products, such as manure and skin, which can be sold to generate income.

Goats – Some MVHHs prefer to raise goats over sheep, depending on the agro-ecology of the residential area. Approximately 11% of households (6% of Cohort 1 only) owned goats obtained from the project and 8% owned goats from other sources in 2020. The slight reduction in goats owned among Cohort 1 households compared to previous years (12% in 2018) indicates that the few MVHHs that raise goats have lost goats in the past year and a half, due to either death or selling goats for meat.

### **Agriculture Tools Support**

To support household' gardens for food production, the project provided households with various agricultural tools appropriate for growing vegetable on small plot of land.

Spades – a spade is a small shovel for digging and turning soil to prepare seed beds for planting. The project previously distributed about 1 spade per household in previous years, and since 2017, has distributed a total of 3,569 spades. In 2020, 59% of households reported currently having a spade provided by the project (66% of households in Cohort 1 only) and 15% reported obtaining a spade from another source. Households reported owning a total of 489 spades obtained from the project or another source. Among households that had fewer spades reported in 2020, the top reason for the loss of spades was due to breakage while using the tool.

Pickaxes – a pickaxe is a tool, with pointed and sharpened edges, used to break hard, dry soil to prepare it for turning with a spade. In past surveys, almost every household reported having a pickaxe. The project has distributed a total of 1,476 pickaxes to households since 2017. In 2020, 57% of all households reported that they currently owned a pickaxe obtained from the project and 19% owned a pickaxe from another source, with respondents owning a total of 506 pickaxes. Among households that reported having a decreased number of pickaxes, the most cited reason for the loss was due to the pickaxe breaking.

Forks and Hoes – Forks are used for breaking hard, dry soil and a hoe is used for weeding and soil softening. The project previously distributed forks and hoes to slightly less than one-third (30%) of all households. In 2020, approximately 20% of households reported currently owning a fork or hoe provided by the project. Among Cohort 1 households, only 20% of households reported still



owning a fork and 22% reported owning a hoe provide by the project. The top reasons provided for no longer owning a fork or hoe were that they broke during use or were lost/stolen.

### **Services and Trainings**

Almost all households received livestock support (100%), farm tools (91%), or seeds (95%) and the majority of households (greater than 90%) believed the support to be helpful and relevant to their needs. MVHH residents also receive training and technical support on agricultural activities by the project, to ensure they have proper agricultural skills and knowledge to support their farming activities. The percentage of households that have participated in a training has increased significantly since the last survey, from 30% in 2018 to 94% in 2020. Similarly, the percentage of households that have received technical support increased from 13% to 67%, indicating that the project's focus on technical support is effectively reaching MVHHs.

The next two services in which many MVHHs participate in are Savings Groups (increasing from 78% in 2018 to 94% in 2020) and participation in ECC Sessions (increasing from 55% in 2018 to 87%). Access to basic sanitation services has also improved. The percent of households that received support with sanitation services increased from 20% in 2018 to 48% in 2020.

### **Program exposure and changes in nutrition practices among MVHHs**

#### **Households with a woman currently pregnant or was pregnant in the last six months in the household**

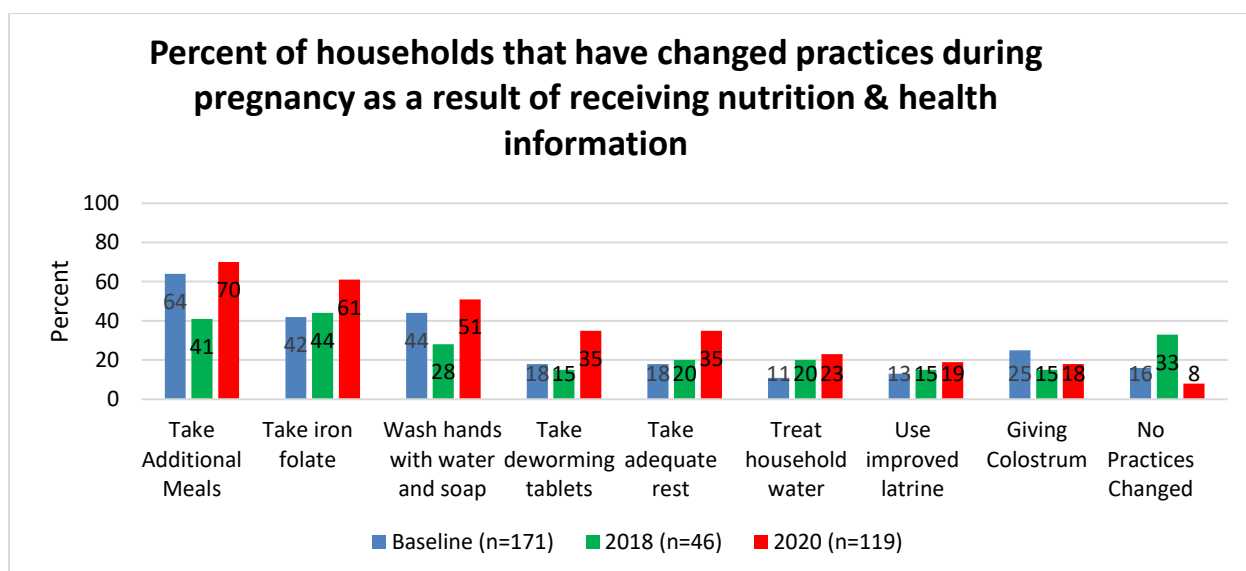
Among all households interviewed in 2020, 28% (181 of 656) had a woman who was currently pregnant or was pregnant 6 months prior to data collection. Among the households with a currently or recently pregnant woman, 66% reported having received information about care during pregnancy, an increase from 2018, when only 47% of households with pregnant women reported receiving information about care during pregnancy. In 2020, the most common sources of information, about care during pregnancy were health extension workers (87% of respondents), health worker (46%) and enhanced community conversations (ECC) and MVHH or Saving Group Meetings (24%). The sources of pregnancy care information became more diverse and households reported receiving information from more sources in 2020 compared to 2018, when only 22% of households reported receiving information through a health worker and 13% from MVHH or Savings Group Meetings. Notably, while the percentage of households who receive information from health workers increased in 2020, the percentage that received pregnancy care information through agriculture extension workers decreased from 50% in 2018 to only 22% in 2020.

**Table 4. Sources of information for households with current or recently pregnant women**

Did you or anyone in household receive information in the following topics in the past six months?	2017	2018	2020
	% (N)	% (N)	% (N)
Households with a woman currently pregnant or was pregnant in the last six months in the household	59.6 (230/386)	27.5 (98/357)	27.6 (181/656)
Received information on taking care of pregnant mother during pregnancy	74.3 (171/230)	46.9 (46/98)	65.7 (119/181)

Source	Health Worker	43.9 (75/171)	21.7 (10/46)	45.5 (54/119)
	Health Extension Worker	76.0 (130/171)	89.1(41/46)	86.6 (103/119)
	AEWs	37.4 (64/171)	50.0 (23/46)	21.8 (26/119)
	HAD/WDA	9.4 (16/171)	0.0 (0/46)	8.4 (10/119)
	Enhanced Community Conversation	0.0 (0/171)	41.3 (19/46)	24.4 (29/119)
	Cooking Demonstration	21.1 (36/171)	0.0 (0/46)	8.4 (10/119)
	MVHHs or Saving Group Meetings	2.3 (4/171)	13.0 (6/46)	23.5 (28/119)
	Social/Religious Group Meetings	0.6 (1/171)	0.0 (0/46)	5.9 (7/119)
	Radio	0.0 (0/171)	2.2 (1/46)	0.8 (1/119)
	Mobile Phone	0.0 (0/171)	0.0 (0/46)	0 (0/119)
	Poster/Flyers/Leaflets	0.0 (0/171)	2.2 (1/46)	4.2 (5/119)
	D/K	1.8 (3/171)	0.0 (0/46)	0 (0/119)

When asked which practices they changed due to this information, almost all (92%) of respondents reported adopting at least one nutritional practice, an increase from 67% in 2018. Most respondents reported diversifying their food intake during pregnancy (79%), increasing number of meals during pregnancy (70%), and taking iron folate during pregnancy (61%). Compared to 2018, there was an increase in the number of households that reported improving these three nutritional practices. Overall, WASH practices such as treating household water and using improved latrines remain a challenge among households, with less than 25% of households reporting improving those practices. However, washing hands with water and soap has improved from 28% in 2018 to 51% in 2020.



**Figure 1. Percent of households with recent or currently pregnant women that reported changing practices during pregnancy as a result of receiving nutrition and health information.**

Households with children 6 – 23 months of age residing in the household

Among the 104 households with children 6-23 months of age, 86% received information on dietary diversity for children, a slight decrease from baseline (89.6%) but an increase from 2018 (66%). Most households received information on dietary diversity through health extension workers (81%) or health workers (45%). Among the Growth through Nutrition interventions, enhanced community conversations are also a common source of information for households but seem to reach less households with children as the proportion that identified ECC as a source of this information decreased from 53.6% of households in 2018 to 42% in 2020. MVHH or Savings Group Meetings are becoming a more common source of information for households, increasing from 8% and 18% in 2017 and 2018 respectively, to 28% in 2020.

**Table 5. Sources of information for households with children 6-23 months of age**

Did you or anyone in household receive information in the following topics in the past six months?		2017	2018	2020
		% (N)	% (N)	% (N)
Households with children 6 – 23 months' of age residing in the household.		66.1 (201/386)	41.5 (148/357)	15.8 (104/658)
Received information on dietary diversity for children 6-23 months		<b>89.6 (180/201)</b>	<b>65.5 (97/148)</b>	<b>87.3 (89/102)</b>
Source	Health Worker	34.4 (62/180)	7.2 (7/97)	44.9 (40/89)
	Health Extension Worker	68.3 (123/180)	84.5 (82/97)	80.9 (72/89)
	AEWs	61.1 (110/180)	34.0 (33/97)	19.1 (17/89)
	HAD/WDA	12.8 (23/180)	2.1 (2/97)	9.0 (8/89)
	Enhanced Community Conversation	0.0 (0/180)	53.6 (52/97)	41.6 (37/89)
	Cooking Demonstration	6.7 (12/180)	5.2 (5/97)	9.0 (8/89)
	MVHHs or Saving Group Meetings	7.8 (14/180)	17.5 (17/97)	28.1 (25/89)
	Social/Religious Group Meetings	N/A	N/A	2.2 (2/89)
	Radio	N/A	N/A	2.2 (2/89)
	Mobile Phone	N/A	N/A	0
	Poster/Flyers/Leaflets	N/A	N/A	6.7 (6/89)
	D/K	1.7 (3/180)	0.0 (0/97)	0
Practices changed	Feeding your child diversified foods (4+ groups)	72.8 (166/180)	66.0 (64/97)	83.1 (74/89)
	Give children >6 months animal sourced foods	72.2 (130/180)	46.1 (53/97)	59.6 (53/89)
	Increase frequency of feeding	58.3 (105/180)	38.1 (37/97)	64.0 (57/89)

	Thick Porridge	50.6 (91/180)	56.7 (55/97)	56.2 (50/89)
	Not Practiced	8.9 (16/180)	11.3 (11/97)	3.4 (3/89)

Most mothers reported adopting three key feeding practices. Among households with children 6-23 months of age, 83% reported feeding their children diversified diets, improving from 73% at baseline and 64% of households reported increasing frequency of feeding, improving from 58% at baseline. Lastly, 60% of households reported giving children animal sourced food, which decreased from 72% at baseline. Thick porridge consumption has nominally increased from baseline, improving from 51% at baseline to 56% in 2020.

#### *Households with children under 2 years' old children residing in the household*

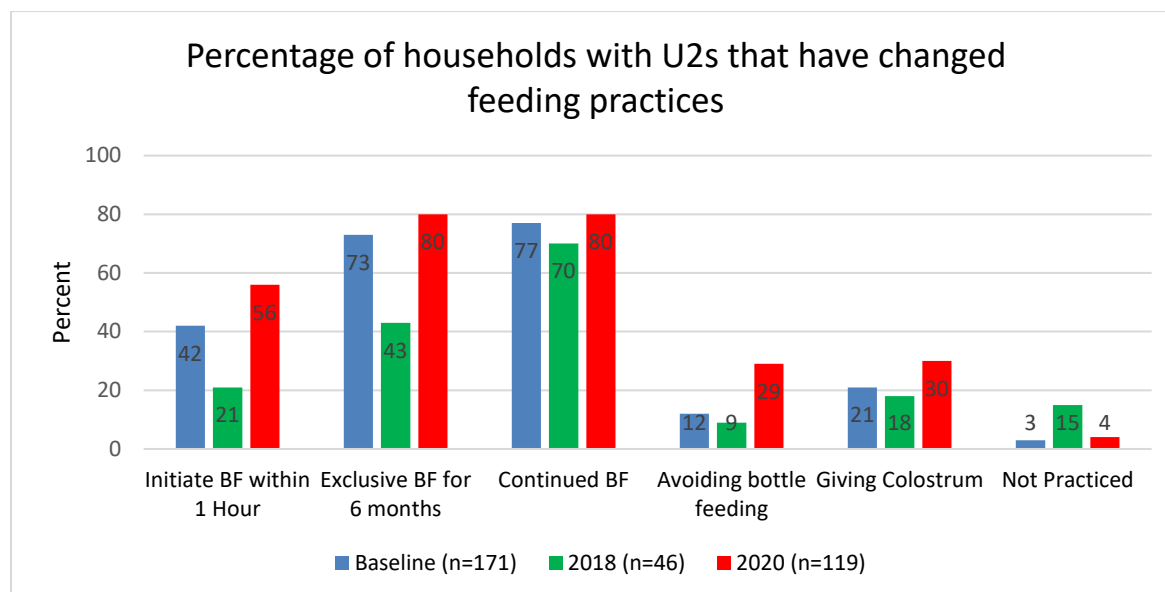
Among these households, 89% of them received information about breastfeeding, increasing from 58% in 2018. Most women received this information from health extension workers (HEW) (85%) or health workers (47%). Among the project interventions, 39% of households received information from ECC and 26% from MVHH or Saving Group Meetings, which is similar to findings from 2018. As a result of exposure to these sources of information, 96% of mothers reported improving at least one feeding practice. 56% of households initiated breastfeeding within 1 hour (compared to 42% in 2018), and 80% of households practiced exclusive breastfeeding for 6 months and continued breastfeeding. 30% of households give colostrum and 29% avoid bottle feeding, increasing from 12% at baseline.

**Table 6. Sources of information for households with children under 2**

Did you or anyone in household receive information in the following topics in the past six months?		2017	2018	2020
		% (N)	% (N)	% (N)
Households with children under 2 years' old children residing in the household.		69.4 (268/386)	48.5 (173/357)	23.9% (157/658)
Received information on breastfeeding		<b>54.9 (189/268)</b>	<b>58.4 (101/173)</b>	<b>89 (137/154)</b> 3 missing
Source	Health Worker	43.9 (83/189)	5.9 (6/101)	46.7 (64/137)
	Health Extension Worker	75.7 (143/189)	90.1 (91/101)	84.7 (116/137)
	AEWs	49.17 (94/189)	35.6 (36/101)	18.2 (25/137)
	HAD/WDA	11.6 (22/189)	1.0 (1/101)	5.8 (8/137)
	Enhanced Community Conversation	0.0 (0/189)	41.6 (42/101)	38.7 (53/137)
	Cooking Demonstration	10.1 (19/189)	1.0 (1/101)	9.5 (13/137)
	MVHHs or Saving Group Meetings	4.8 (9/189)	26.7 (27/101)	26.3 (36/137)
	Social/Religious Group Meetings	N/A	N/A	2.9 (4/137)
	Radio	N/A	N/A	2.9 (4/137)
	Mobile Phone	N/A	N/A	0

Poster/Flyers/Leaflets	0.5 (1/189)	2.0 (2/101)	5.8 (8/137)
D/K	1.4 (3/189)	0.0 (0/101)	0

**Figure 2. Percent of households with children under 2 years of age that have reportedly changed select feeding practices.**



#### Households with children under 5 years of age residing in the household

Among the 543 households with children under 5 year old, 75% reported receiving information about treating children's diarrhea, increasing from 59% at baseline. Most households received this information from HEWs (84%). Among the Growth through Nutrition interventions, the most common sources of information about treating diarrhea were ECC or Saving Group Meetings (among 34% of households). Almost all of the households (99%) that reported receiving information about treating diarrhea also reported adopting select health or nutritional practices, such as taking their child to a nearby health facility (75% of households in 2020 compared to 58% at baseline); increasing meal frequency (52% in 2020 compared to 42% at baseline); and increasing frequency of breastfeeding (44% in 2020 compared to 43% at baseline).

**Table 7. Sources of information for households with children under 5**

Did you or anyone in household receive information in the following topics in the past six months?	2017	2018	2020
	% (N)	% (N)	% (N)
Households with children under 5 years of age residing in the household.	93.8 (362/386)	92.4 (330/357)	82.5 (543/658)
Received information on treating your children's diarrhea	58.6 (212/362)	37.3 (133/330)	75.1 (408/543)

Source	Health Worker	41.5 (88/212)	6.8 (9/133)	38.2 (156/408)
	Health Extension Worker	77.8 (165/212)	91.7 (122/133)	83.6 (341/408)
	AEWs	42.9 (91/212)	33.8 (45/133)	26.5 (108/408)
	HAD/WDA	12.7 (27/212)	2.3 (3/133)	10.3 (42/408)
	Enhanced Community Conversation	0.0 (0/212)	36.1 (48/133)	34.1 (139/408)
	Cooking Demonstration	15.1 (32/212)	1.5 (2/133)	6.1 (25/408)
	MVHHs or Saving Group Meetings	3.3 (7/212)	27.8 (37/133)	30.1 (123/408)
	Social/Religious Group Meetings	0.9 (2/212)	0.0 (0/133)	3.4 (14/408)
	Radio	0.9 (2/212)	1.5 (2/133)	1.5 (6/408)
	Mobile Phone	N/A	N/A	0 (0/408)
	Poster/Flyers/Leaflets	N/A	N/A	5.4 (22/408)
	D/K	1.9 (4/212)	0.0 (0/133)	0 (0/408)
Practices changed	Increase frequency of BF	43.4 (85/212)	27.8 (37/133)	43.6 (178/408)
	Increase Meal Frequency	42.3 (83/212)	31.6 (42/133)	52.2 (213/408)
	Rehydrate the Child	30.6 (60/212)	10.5 (14/133)	28.7 (117/408)
	Took the child to nearby health facility	58.2 (114/212)	37.6 (50/133)	74.8 (305/408)
	Giving ORS and Zinc	28.1 (55/212)	32.3 (43/133)	42.2 (172/408)
	Not Practiced	15.3 (30/212)	35.3 (47/133)	13.7 (56/408)
	N/A	0.5 (1/212)	1.5 (2/133)	1.1 (6/408)
<b>Received information on hand washing with soap at critical times</b>		<b>78.0 (301/362)</b>	<b>66.6 (218/327)</b>	<b>87.7 (478/545)</b>
Source	Health Worker	31.5 (95/301)	4.6 (10/218)	36.6 (175/478)
	Health Extension Worker	73.5 (222/301)	79.8 (174/218)	80.5 (385/478)
	AEWs	47.4 (143/301)	30.7(67/218)	28.0 (134/478)
	HAD/WDA	7.6 (23/301)	2.3 (5/218)	11.7 (56/478)
	Enhanced Community Conversation	0.0 (0/301)	47.7 (104/218)	36.2 (173/478)
	Cooking Demonstration	13.2 (40/301)	5.0 (11/218)	10.7 (51/478)
	MVHHs or Saving Group Meetings	7.6 (23/301)	17.9 (39/218)	28.2 (135/478)
	Social/Religious Group Meetings	0.7 (2/301)	0.0 (0/218)	3.6 (17/478)
	Radio	0.3 (1/301)	1.4(3/218)	1.0 (5/478)
	Poster/Flyers/Leaflets	0.0 (0/301)	1.4 (3/218)	6.9 (33/478)
	D/K	1.0 (3/301)	0.0 (0/218)	0
	Wash hands with water and soap or ash at critical times	97.0 (293/301)	89.4 (195/218)	93.5 (447/478)

Practices changed	Not Practiced	3.0 (9/301)	10.6 (23/218)	6.5 (31/478)
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Approximately 88% of these households also received information on handwashing with soap at critical times, an increase from 67% in 2018. The main source of information on handwashing was HEWs, which 81% of households identified as a source of information, similar to findings from 2018. Among the project's interventions, women also received information from ECC (36%) and Saving Groups Meetings (28%). 94% of respondents reported washing hands with water and soap or ash at crucial times, increasing from 89% in 2018.

### Association of Exposure to Project Activities and Key Nutrition/WASH Household Outcomes

One of Growth through Nutrition's main focus areas is the implementation of various social and behavior change communication (SBCC) activities to improve awareness of healthy behaviors as well as to create an enabling environment to encourage adoption of healthy behaviors among MVHH residents. Among all the households interviewed in 2020 (Cohort 1 and Cohort 2), 76% of respondents reported that they or someone in their household participated in Women's Saving Groups and 83% reported that someone in the household participated in Enhanced Community Conversations (ECC) conducted by local NGOs in the last six months. The project sought to assess if participation in these two community-level SBCC activities was associated with improved nutrition and WASH household-level outcomes.

For maternal health, minimum dietary diversity of women and uptake of Iron Folic Acid (IFA) supplements are key outcomes of interest. While overall, the proportion of women who met adequate MDD improved since 2017, the data show that participating in ECCs alone was not significantly associated with having adequate MDD,  $X^2 (1, N=656) = 3.3, p = 0.19$ . Because the proportion of women with adequate MDD improved overall, this indicates that the increased access to and consumption of diverse food group is a result of other variables and not participation in ECC alone. On the other hand, there was a significant relationship between participating in ECC and taking or purchasing IFA during the last pregnancy,  $X^2 (1, N=201) = 11.96, p = 0.018$ . Thus women who participate in ECCs are more likely to take IFA during pregnancy.

For infant and young child nutrition outcomes, ECC activities focus on encouraging parents to practice exclusive breastfeeding and increasing the diversity of foods children consume. The 2020 survey data showed that participating in ECCs was not significantly associated with MDD of children,  $X^2 (1, N=100) = 1.17, p = 0.558$ . However, compared to baseline, there was a significant increase in the proportion of children who had adequate MDD. This indicates that ECCs alone do not significantly contribute to the change in consumption practices among children. Similarly, participating in ECC was not significantly associated with early initiation of breastfeeding under six months,  $X^2 (1, N=54) = 2.35, p = 0.31$ , nor with exclusive breastfeeding under six months,  $X^2 (1, N=55) = 0.08, p = 0.96$ . The change in the proportion of infants under 6 months who were breastfed changed minimally compared to baseline, thus the ECCs did not significantly impact breastfeeding practices. In addition to improving awareness and encouraging improved nutrition practices, the ECCs also focus on key WASH behaviors to improve child nutrition and health outcomes. Overall in 2020, a greater proportion of households reported having handwashing

facilities compared to baseline. However, participating in the ECCs was not significantly associated with having handwashing facilities,  $X^2 (1, N=656) = 4.10, p = 0.129$ . Similarly, participating in ECCs was not significantly associated with washing hands before feeding children,  $X^2 (1, N=655) = 0.60, p = 0.743$ .

In addition to SBCC activities, Growth through Nutrition also provides significant livelihood support to MVHHs to improve production of agricultural and animal products and increase household income. This is achieved through the provision of livestock and seeds, agricultural training, and the organization of women's savings groups to improve capital and financial literacy. The relationship between participation in a Women's Saving Group and having a handwashing facility at home was not significant,  $X^2 (1, N=656) = 0.03, p=0.86$ . Additionally, among the households that reported currently raising chickens (69%), approximately 68% received technical assistance (TA) on agricultural activities. There was not a significant association between receiving TA and currently raising chickens,  $X^2 (1, N=642) = 0.22, p = 0.64$ . Thus, observed decreases in the number of chicken holdings since baseline are not associated with the provision of technical support and are influenced by other factors.

Among Cohort 1 households, there was a significant increase in the proportion of women who had adequate MDD compared to baseline. One of the project's hypotheses is that supporting households to generate income will increase access to diverse foods, which in turn will support women to consume diverse diets during and after pregnancy. Therefore, an increase in household income should impact MDD for women. Respondents from Cohort 1 were categorized into two groups, whether or not they reported at least a 10% increase in household income since baseline, to assess if MDD among women was influenced by change income. The data analysis showed that a 10% or more increase in household income alone was not significantly associated with having adequate MDD,  $X^2 (1, N=307) = 1.18, p = 0.28$ . Therefore, the significant change in women who have adequate MDD is associated with other factors.

## **Household Level Outcomes**

The project supports MVHHs with the provision of select livelihoods assets and tools such as six chicken, two goats or sheep, legumes, root crops, vegetables, fruit seedlings and farm tools. MVHHs also received NSA training in order to establish their home gardens and to be able to produce and consume diversified foods on a small plot of land and with initial capital. MVHH residents are also organized in to savings groups and are taught and encouraged to start saving to be fiscally secure and address financial challenges. At the household level, Growth through Nutrition monitors household hunger, household income earned through vegetables or food products grown from project support, and select water, sanitation, and hygiene (WASH) practices.

### ***Household Hunger***

Using FANTA's Household Hunger Scale (2011), Table 8 below presents the percentage of households that reported experiencing hunger in the month preceding the survey. The indicator is sensitive to seasonal changes, as households primarily report that the peak months they experience a food gap are July, August, and September. The 2020 survey was conducted in February and



March, while the 2017 and 2018 surveys were conducted in October and November, right after the months with the highest food gaps. Therefore, findings from this indicator do not necessarily represent the experiences of households throughout the year.

As presented in Table 8 below, the percentage of households experiencing little to no hunger, there is an increase in 2020 compared to previous years, specifically when comparing only Cohort 1 households, which are the same households surveyed in 2017 and 2018. The difference observed in 2017 compared to 2020 is statistically significant,  $p < 0.001$ . The change in household hunger categories was mostly among the proportion of households who previously experienced “moderate hunger” who now report experiencing “little to no hunger”. The number of households that previously experienced “severe hunger in the past month” decreased minimally in 2020, indicating that the most vulnerable of households that face severe hunger still face challenges in food access and consumption.

**Table 8. Percentage of MVHHs by Household Hunger Categories**

<b>Household Hunger Scale</b>	<b>2017</b>	<b>2018</b>	<b>2020</b>	<b>2020</b>	<b>2020</b>
	<b>N=386</b>	<b>N=357</b>	<b>Cohort 1</b>	<b>Cohort 2</b>	<b>All</b>
			<b>N=319</b>	<b>N=337</b>	<b>N=656</b>
Little to no hunger in the past month	71.0%	66.1%	89.3%	92.6%	91.0%
Moderate hunger in the past month	27.0%	31.9%	9.1%	6.5%	7.8%
Severe hunger in the past month	2.1%	2.0%	1.6%	0.9%	1.2%

### ***Adequacy of Household Food Provisioning***

Households were asked if they were able to cover their household’s food consumption needs from their own income or production in the last year. This year, 43% of households reported being able to cover their household’s food consumption needs, an increase from baseline (35%) and 2018 (28%). Of the households reporting that they could not cover their household’s food needs, they were asked to identify which months they experienced food gaps. The figure below presents the percentage of households who could not cover their household’s food needs in the previous year by each month they experience a monthly food gap. Clearly, August is the month when the most households experience food insecurity. Responses also illustrate that in 2020, fewer households experienced a food gap overall in the last year compared to 2017 and 2018. For these households, the average number of months per year they experienced a food gap did not change in 2020 compared to 2018, remaining at 3.2 months on average. Thus, despite the possible seasonal implications on when the surveys were conducted, household hunger has significantly decreased among households compared to previous years.

### ***Household Income***

MVHH residents are asked to report their sources of income, whether from their own agricultural production, non-agricultural sources such as labor, and agricultural production specifically supported by the project. As Table 6 shows, for the large majority of MVHHs, their sources of income are from their own production of either vegetable or fruit products, live animals, or animal products (90%) and sources other than agriculture (80%). The proportion of MVHHs that are able to earn income from their own

production has increased since baseline, improving from 59% in 2017 to 90% in 2020. The proportion of households that earn income from production that was supported by the project has also increased since 2018, from 64% to 83%. Interestingly, while the proportion of households reporting having no source of income increased from 2% in 2018 to 10% in 2020, the proportion of households that reported having more than 2 sources of income increased. Thus, households are finding new income sources.

**Table 9. Sources of Income for MVHHs.**

Sources of Income		2017 (N=386)	2018 (N=357)	2020 (N=656)
		%	%	%
Percentage earning income from own production (vegetable or fruit products, live animals, or animal products)		59.3	58.3	91.1
Percentage earning income from sources other than agriculture		60.1	81.5	79.8
Percentage earning income from production supported by project (vegetable or fruit products, live animals, or animal products)		1.8	64.1	83.4
Percentage of households with income from own agricultural production:	0 sources	11.7	2.2	9.8
	Only 1 source	55.4	19.0	25.2
	2 sources	32.9	51.3	25.5
	3 sources	0.0	27.5	26.4
	>3 sources	N/A	NA	13.3
	Mean # of sources	1.2	2.0	2.1

### ***Income from Sales of Own Production***

The table 7 below is a summary of the amount of income earned by these MVHHs in the previous year from their own production. The largest percentage of these households, and the largest amount earned, came from the sales of live animals in 2020, a significant increase compared to previous years. 436 MVHHs (66%) reported earning a total of 1.23 million birr in the previous year through the sale of live animals. On average, households earned about 3,081 birr from the sale of live animals in the previous year. In previous years, the sale of vegetable products had brought the largest amount earned for the most number of households.

**Table 10. Types of MVHH Income from Own Production**

Income from Own Production NOT Project supported (birr)	2017 (N=386)	2018 (N=357)	2020 (N=656)	2020 Cohort 1 (N=319)	2020 Cohort 2 (N=337)
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Sale of vegetable products	Total (birr)	758,665	79,730	245,165	146,705	98,460
	n	(181)	(69)	(162)	(90)	(72)
	HH mean (birr)	4,192	1,156	1,513	1,630	1,368
Sale of live animals	Total (birr)	139,833	72,460	254,070	169,020	85,050
	n	(53)	(28)	(60)	(32)	(28)
	HH mean (birr)	2,638	2,588	4,235	5,282	3,038
Sale of animal products	Total (birr)	18,517	5,460	132,556	89,576	42,980
	n	(23)	(10)	(75)	(42)	(33)
	HH mean (birr)	805	546	1,767	2,133	1,302
Income from sale of Other, such as grain, cash crops, etc	Total (birr)	164,760	742,455	1,546,803	861,615	685,188
	n	(44)	(158)	(257)	(140)	(117)
	HH mean (birr)	3,745	4,699	6,018	6,154	5,856
<b>Total</b>	Total (birr)	<b>1,081,775</b>	<b>900,105</b>	<b>3,650,427</b>	2,025,976	1,624,451
	n	(229)	(208)	(591)	(313)	(278)
	HH mean (birr)	<b>4,724</b>	<b>43,27</b>	<b>6,177</b>	6,473	5,844

Sale of vegetable products – In previous years, the sale of vegetable products was the largest source of income for households. In 2020, vegetable products became the third highest source of income for MVHHs, with 281 households (43%) reporting earning income from sale of vegetable products supported by the project and from their own production. These households earned a total of 358,410 birr in earnings from selling vegetables. On average, these households earned 1,275 birr in the previous year. This is a marked decrease from baseline, as households previously reported being able to earn more income per household from the sale of vegetable products. This decrease could be due to households increasing consumption of their own vegetable production, and therefore selling less of their harvest.

Sale of live animals – This year, MVHHs reported a significant increase in income earned from the sale of live animals. 436 households (66%) from all interviewed (and 126 from Cohort 1 only) reported earning, on average, 3,081 birr from the sale of live animals. The average amount of income earned has increased compared to previous years. In total, the MVHHs earned 1,343,432 birr from the sale of live animals. The increased sale in live animals this year could be a result of the sale of offspring of livestock previously received from the project.

Sale of Animal products – In previous years, few households reported selling animal products. However, in 2020, 58% of households that reported having an income reported the sale of animal products as a source of their income. In total, 383 households earned 403,132 birr and an average of 1,053 birr per household from the sale of animal products, double the average income households previously reported earning from animal products. This is a significant increase from 2018, when only 3% of MVHHs reported any income from the sale of animal products.

Sale of other types of agricultural products (grains, cash crops, wood, herbs, spices, etc) – In 2020, approximately 40% of respondents reported earning an income from other agricultural products such as grains, cash crops, wood, spices, or fishery. The sale of these products amounted to a total of 1,545,453 birr across all the households, and 5,899 birr on average per household.

### ***Income from Non-Agriculture Activities***

In 2020, 80% of MVHHs reported earning income from non-agricultural activities, earning a total of 2.8 million birr or 5,387 birr on average per household. Among Cohort 1 households, the same households interviewed in previous years, the average income earned from these non-agriculture activities increased from 3,321 birr in 2018 to 5,374 birr in 2020.

**Table 11. Income Earned by MVHHs from Non-Agricultural Activities**

<b>Income from non-agriculture activities</b>		<b>2017 (N=386)</b>	<b>2018 (N=357)</b>	<b>2020 All (N=656)</b>	<b>2020 Cohort 1 (N=319)</b>
Income earned	Total (birr)	1,054,720	966,333	2,817,731	1,413,471
	n	232	291	523	263
	HH Mean	4546 birr	3321 birr	5,387 birr	5,374 birr

### ***Income from Project Related Support***

The total income earned in 2020 that respondents attributed to project support was 1.47 million birr from 567 households (86%). On average, each household among all respondents earned 2,568 birr in the previous year from products supported by the project. Compared to previous years, Cohort 1 households reported an overall nominal increase in income from project support-related products. On average, Cohort 1 households reported increased earnings from animal products, live animals, or vegetables related to project support. In 2018, these households earned an average of 835 birr in the previous year, but in 2020, the same households earned 2,633 birr on average.

**Table 12. MVHHs Income from Growth through Nutrition Project Support**

<b>Income from Growth through Nutrition Project Support</b>		<b>2018 (N=357)</b>	<b>2020 All (N=656)</b>	<b>2020 Cohort 1 (N=319)</b>
<b>Sale of animal products</b>	Total (birr)	13,680	270,576	131,058
	n	(91)	(383)	(179)
	HH mean	150	706	732
<b>Sale of live animal</b>	Total (birr)	151,871	1,089,362	531,340

	n	(116)	(436)	(207)
	HH mean	1,309	2,498	2,566
<b>Sale of vegetables</b>	Total (birr)	25,690	113,245	51,375
	n	(97)	(281)	(126)
	HH mean	265	403	407
<b>TOTAL</b>	Total (birr)	<b>191,240</b>	<b>1,473,183</b>	<b>713,773</b>
	n	(229)	(567)	(271)
	HH mean	835	2568	2633

Sale of animal products – In 2020, 383 households reported an income from the sale of animal products produced from project support. In total, these households earned 270,576 birr and on average, each household earned approximately 706 birr from these products in the previous year. When comparing only Cohort 1 households to their earned income in 2018, the average income from the sale of animal products increased significantly from 150 birr in 2018 to 732 birr in 2020.

Sale of live animal – In 2020, 436 households reported an income from the sale of live animals raised through project support. In total, these households earned 1.09 million birr and on average, each household earned approximately 2,498 birr from these products in the previous year. When comparing only Cohort 1 households to their earned income in 2018, the average income from the sale of live animals almost doubled from 1,309 birr per household in 2018 to 2,566 birr in 2020.

Sale of vegetable products – In 2020, 281 households reported an income from the sale of vegetable products grown through project support. In total, these households earned 113,245 birr and on average, each household earned approximately 403 birr from these products in the previous year. When comparing only Cohort 1 households to their earned income in 2018, the average income from the sale of vegetable products grown through project support increased from 265 birr in 2018 to 407 birr in 2020.

### *Overall Household Income*

The table 10 below present a summary of household income from project related inputs and overall household income, as reported across the three periodic surveys that have been conducted. In 2020, project related income among Cohort 1 households increased by 273% compared to the same households in 2018 and represented 23.5% of the household's total income in the previous year. Among all households in 2020, income from project activities accounted for 34% of household income. Total income from all sources also increased by 41%, when comparing income among households in Cohort 1 in 2020 to 2018. The increases in total income from project-related inputs and from all sources observed in Cohort 1 from baseline to 2020 were statistically significant.

**Table 13. Percentage Change in MVHHs Income from 2017 to 2020**

<b>Income Sources</b>	<b><u>2017</u></b> (N=386)	<b><u>2018</u></b> (N=357)	<b><u>2020 ALL</u></b> (N=656)	<b><u>2020 Cohort 1</u></b> (N=319)	<b><u>% change</u></b>	<b><u>P-value</u></b>
Total income from project related inputs (birr)	15,310 (n=7)	191,241 (n=229)	1,473,183 (n=567)	713,773 (n=261)	+ 273 (2018 to 2020 Cohort 1)	.000* (2018 to 2020 Cohort 1)
Total income from all sources (birr)	2,151,805 (n=341)	2,057,678 (n=349)	6,472,658 (n=645)	3,038,922 (n=313)	+41 (2017 to 2020 Cohort 1)	.000* (2017 to 2020 Cohort 1)
Household average (birr)	6,310 (n=341)	5,896 (n=349)	10,035 (n=645)	9,709 (n=313)	+53 (2017 to 2020 Cohort 1)	
% of total HH income from project inputs/ activities	0.1	6.3	34%	23.5%		
* <i>p-value</i> ≤ 0.05 is statistically significant						

### *Household Expenditures Covered by Project-related Support*

As project support started after the baseline survey, data reported on household expenditures using project related income will only be presented for 2018 and 2020. Table 11 below presents, in rank order, the percentage of households using project related income for specific household expenditures, by expenditure category. 63% of MVHHs in 2020 reported their spending money on their savings, a significant increase from the 22% of households that reported doing so in 2018. The second and third category of expenditures from project income was food purchases (54%) and cleaning/sanitation supplies (42%). The categories with the greatest increases in proportion of households that spend money since 2018 are Savings and Cleaning/Sanitation, showing that project activities such as Savings Groups and interpersonal communication about WASH are positively influencing spending behaviors in households. While the proportion of households that spent income on food purchases largely remained the same in 2020 compared to 2018, remaining stable around 54%, there was an increase in the proportion of households spending money on all other expenditure categories. More households were able to spend project-related income on most of their household needs that can contribute to overall well-being as seen by increased health and education expenditures.

**Table 14. MVHHs Expenditures Using Income Generated from Growth through Nutrition's Inputs and Activities.**

<b>Household Expenditures Using Project Related Income</b>	<b>2018</b>  N=357	<b>2020</b> (N=656)	<b>2020 Cohort 1</b> (N=319)	<b>2020 Cohort 2</b> (N=337)
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% households with income from project related inputs and/or activities	64	96.5	96.3	96.6
<b>Expenditures from project related income (in rank order by % of households in 2020)</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Savings	22.0	63	61	65
Food purchase	53.0	54	58	50
Cleaning/sanitation	12.0	42	41	42
Clothing	20.0	37	37	37
Animal purchase	14.0	32	27	37
Cooking/light (kerosene)	4.0	32	33	31
Education	6.0	26	29	24
Health/health related	9.0	23	26	20
Agriculture inputs	3.0	18	19	18
Animal care	2.0	15	14	17
Vegetable seeds	1.0	15	14	16
Payment of debt	3.0	8	8	9
Farm tools	0.0	8	7	10
House improvement	1.0	6	6	7

### *Asset Ownership*

Households were asked about changes in five assets: 1) the number of radios owned, 2) the number of mobile phones owned, 3) their house's roofing material, 4) their house's wall material, and 5) if they owned a separate live building for keeping livestock.

Comparing this year's responses to 2018, the largest change in assets was in ownership of mobile phones, with 42% of households reporting they own one mobile phone, an increase from 33% in 2018. However, when comparing to baseline, the percentage of households that own a mobile phone has not changed. Radio ownership has increased slightly, from 10% in 2018 to 14% in 2020. Most households (86%) still do not own a radio and 52% do not own a mobile phone.

Livestock also contribute to household assets. The highest percent of households (79%) reported currently owning sheep provided by the project. In total, the number of sheep owned by households obtained from either the project or another source was 1,849 sheep. Chickens were the second most common livestock owned by homes, with 68% of households reporting that they currently have chickens obtained from the project. The total number of chickens owned by households, obtained from either the project or another source, was 2,479 chickens. When comparing results only from Cohort 1 to results from 2018, the percent of households that own chickens decreased

from 89% in 2018 to 66% this year. This indicates that chickens previously owned were sold or deceased since the last survey. The project also distributes goats to MVHHs that choose to raise goats. In 2020, only 11% of household currently had goats obtained from the project. Notably, there was a significant number of households (519 respondents) that were missing data for this indicator, so goat ownership in 2020 is inconclusive.

The highest increase in household assets in 2020 occurred among households with heifers obtained from other sources, as GtN does not provide MVHHs with households. This year, the percent of households that owned heifers doubled from 8% in 2018 to 17% in 2020, indicating that households are finding ways to purchase heifers, with either their own increased household income from selling livestock or vegetables provided by the project or loans.

### *Sanitation and Hygiene*

An important component of the MVHH strategy is the provision of interpersonal communication and support to encourage adoption of proper sanitation and hygiene practices. Table 12 below shows the percentage of household respondents who reported practicing key behaviors of interest, such as hand washing at critical times during the day and use of soap or clean water. Previously at baseline, only 2% of households had reported having a handwashing facility at home. In 2020, the percent significantly increased to 28% among all households and 31% among Cohort 1 only, with the majority of respondents (76%) indicating that they use a water basin with jug and 90% of respondents indicating that their handwashing facility is located near the latrine. Among the households that have a handwashing facility, only about one-third (36%), were observed to have water available at the designated handwashing facility. The increase observed from baseline in Cohort 1 households with a handwashing facility at home was statistically significant ( $p<0.001$ ).

60% of respondents wash their hands with at least soap or ash/endod most of the time, a slight increase from baseline (55% in 2017). Almost all respondents except one (655 out of 656) reported washing their hands the previous day. In 2020, most respondents reported washing their hands before food preparation (89%) and before eating (91%). The times when the least number of respondents reported washing their hands was when they are reminded to do so (12%), before feeding a child (41%), and after cleaning a child following defecation (43%). Only 23% of respondents practice hand washing at the main critical times (after toilet use/defecation /urination, after cleaning child following defecation, before preparing food, before eating, and before feeding a child), increasing from the 18% of households who reported practicing the same behaviors at baseline. Among Cohort 1 households, the changes in the proportion of households who practice handwashing after defecation/urination, after cleaning children following defecation, before serving a meal, and after eating were statistically significant. While handwashing behaviors have generally improved, handwashing behaviors related to childcare are still lagging behind compared to other time points, indicating the need for additional SBCC and education with households.

**Table 15. MVHHs Sanitation and Hygiene Practices**

Sanitation and Hygiene	2017	2018	2020	2020	P-Value^
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				ALL	Cohort 1	
		% (n)	% (n)	% (n)	% (n)	
Yesterday, did you wash your hands		99.5 (284/386)	100.0 (357/357)	99.8 (655/655)	100 (319/319)	
If YES, tell all moments you did wash hands	Dirt is visible	49.5 (190/384)	56.3 (201/357)	59.4 (389/655)	58.6 (187/319)	.026
	<b>*After toilet use/defecation/urination</b>	62.2 (239/384)	70.6 (252/357)	70.2 (460/655)	73 (233/319)	.009*
	<b>*After cleaning child following defecation</b>	39.8 (153/384)	30.0 (107/357)	42.7 (280/655)	42.9 (137/319)	.004*
	<b>*Before preparing the food</b>	87.2 (335/384)	84.0 (300/357)	88.7 (581/655)	89.3 (285/319)	.078
	Before serving a meal	55.2 (212/384)	53.5 (191/357)	75.4 (494/655)	76.5 (244/319)	.000*
	<b>*Before eating</b>	87.2 (335/384)	87.7 (313/357)	91.3 (598/655)	91.2 (291/319)	.068
	After eating	71.6 (275/384)	61.1 (218/357)	78.5 (514/655)	78.7 (251/319)	.000*
	<b>*Before feeding a child</b>	37.2 (143/384)	44.3 (158/357)	40.6 (266/655)	39.8 (127/319)	.682
	When I am reminded to do so	1.3 (5/384)	3.9 (14/357)	11.9 (78/655)	10.7 (34/319)	.000*
*Percent who practice all five critical hand washing moments ( <b>highlighted in bold above</b> )		17.6 (68/386)	15.8 (61/357)	23.1 (151/655)	23.8 (76/319)	.117
What do you use to wash your hands most of the time?						.000*
	Water Only	44.9 (172/384)	38.9 (139/357)	40.3 (264/655)	44.2 (141/319)	
	Water and Soap	52.7 (202/384)	53.5 (191/357)	51.6 (338/655)	46.1 (147/319)	
	Water and Ash/Endod	2.3 (9/384)	7.6 (27/357)	8.1 (53/655)	9.7 (31/319)	
Percentage of washing hands with soap / ash/endod and water most of the time		55.1 (211/383)	61.1 (218/357)	60 (391/655)	56 (178/319)	.065
Handwashing facility at home		2% (8/386)	14% (51/357)	25.5 (86/655)	30.7 (98/319)	.000*
^Statistical analysis for p-value compares 2020 Cohort 1 only to 2018 and 2017 * p-value ≤ 0.05 is statistically significant						

## Individual Level Outcomes

### Children

### Infant and Young Child Feeding (IYCF)

The WHO recommends a specific set of appropriate infant and young child feeding (IYCF) practices, which includes exclusive breastfeeding in the first 6 months of life, continued breastfeeding through age 2 years, and introduction of solid and semisolid foods at age 6 months (WHO 2008, 2010a). The WHO also suggests that young children consume a diverse diet from different food groups, including animal source foods that satisfy children's growing micronutrient needs. For this study, indicators on breastfeeding (early initiation of breastfeeding, exclusive breast-feeding), dietary diversity, and meal frequency were the primary indicators of interest. Due to the smaller sample size of households with children under 2 in 2018, data from 2020 will be compared baseline results to understand trends in behaviors and child outcomes.

## **Breastfeeding**

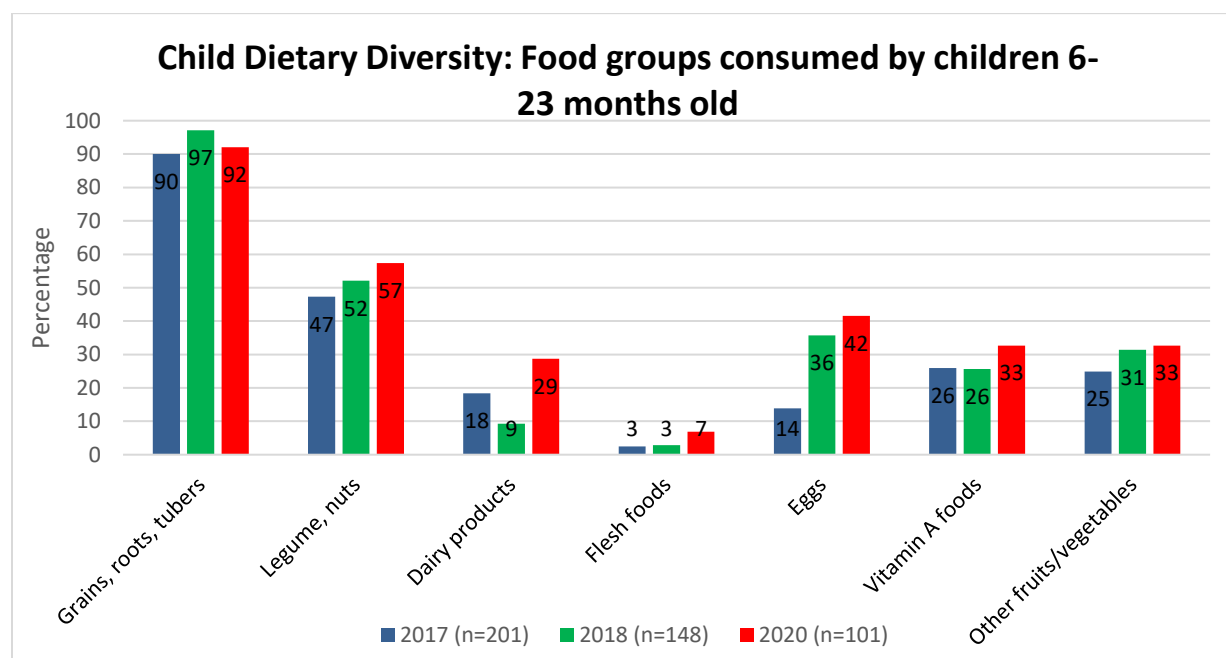
Early Initiation of Breastfeeding – Early initiation of breastfeeding contributes to overall child health and nutrition as it contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. It is recommended that children be put to the breast within 1 hour after birth and pre-lacteal feeding is highly discouraged for mother to practice. In our survey, only 65% of households with children under 6-months (34 out of 52) reported early initiation of breastfeeding, decreasing from 73.1% in 2017. The decreasing prevalence of early breastfeeding initiation indicates that household and community-level activities to promote breastfeeding among MVHHs needs to be strengthened in order to better support mothers who are able to breastfeed.

Exclusive Breastfeeding – Breast milk contains all the nutrients needed by children in the first 6 months of life, is an uncontaminated nutritional source, and reduces the risk of morbidity and mortality due to diarrhea and pneumonia. It is recommended that children should be exclusively breastfed, consuming no other foods, during the first 6 months of their life. Among the households with infants less than 6 months old, 93% reported exclusively breastfeeding their children. This has slightly decreased from baseline, when 98.5% of respondents reported exclusively breastfeeding their children.

Food Groups Consumption – Compared to baseline, there was an increase in the percentage of children 6-23 months of age consuming all major food groups. The biggest increase was in the consumption of eggs, as only 14% of children had been consuming eggs at baseline and in 2020, 42% of children consumed eggs. There were also increases in the percentage of children who consumed dairy products (18% in 2017 to 29% in 2020), legumes and nuts (47% to 57%), other fruits/vegetables (25% to 33%), and Vitamin A foods (26% to 33%). The percentage of children who consumed grains, roots, and tubers slightly increased from 90% to 92%. The increase in these food groups can be directly attributed to the project interventions, as the provision of poultry, legumes, tubers, and nutrient-dense vegetable seeds and support for their cultivation are a major component of the project's MVHH strategy. The increase in consumption of dairy products is likely attributed to the increase in dairy-producing livestock that the MVHHs are raising, including heifers, goats, and sheep. The consumption of flesh foods has slightly increased but continues to

be relatively rare amongst MVHHs, as livestock owned by most MVHHs are raised to contribute to income generation activities rather than for slaughter to feed families. The practice of feeding meat to children is still not common and the affordability of meat are factors related to low rates of meat consumption among children. To increase meat consumption, project activities would need to address these behavioral and economic barriers to accessing and consuming meat.

**Figure 3. Consumption of Seven Food Groups by Children 6-23 months old in MVHHs**



**Minimum Dietary Diversity among Children** - Children are achieving minimum dietary diversity if they have consumed foods coming from at least four out of seven food groups. Achieving the minimum dietary diversity of an infant or young child indicates micronutrient sufficiency (World Health Organization 2010b). Table 13 below shows the percentage of children who consumed four out of seven food groups increased from 12% in 2017 to 34% in 2020, a statistically significant increase ( $p<0.001$ ). These results correlate with the observed increase in consumption across all seven food groups described in the previous section.

**Minimum Meal Frequency** – Minimum meal frequency is the minimum amount of energy intake required by an infant or young child from foods other than breastmilk in a day. The minimum meal frequency requirements for an infant or young child in a day are determined by their age and whether or not they are breastfed. Breastfeeding infants age 6 to 8 months are expected to have at least 2 meals per day while breastfed infants age 9 to 23 months are recommended to have at least 3 meals per day. Non-breastfed children age 6 to 23 months are suggested to eat at least 4 times a day (World Health Organization 2010b). Among all children age 6-23 months, the percent who met the minimum meal frequency increased from 70% in 2017 to 76% in 2020. The greatest

increase in proportion of children who meet the minimum meal frequency was among breastfed children 9 to 23 months old, improving from 74% to 82%.

**Minimum Acceptable Diet (MAD)** – Minimum acceptable diet is a composite indicator combining the dimensions of dietary diversity and meal frequency. MAD is used to assess the proportion of children age 6-23 months who meet minimum criteria with respect to infant and young child feeding practices. The minimum acceptable diet (MAD) among breastfed children is met if the child consumes four or more food groups from the standard seven food groups and is fed the minimum number of times or more per day. Minimum dietary diversity for the non-breastfed child is defined as four or more feedings of solid, semi-solid, soft food, or milk feeds for children 6–23 months. For non-breastfed children to receive a minimum acceptable diet (MAD), at least two of these feedings must be milk feeds. In 2020, the percent of children who achieved MAD was 31%. Compared to baseline, when only 12% of children had achieved MAD, this is a statistically significant increase ( $p < 0.001$ ).

**Table 16. Child-Level Outcomes**

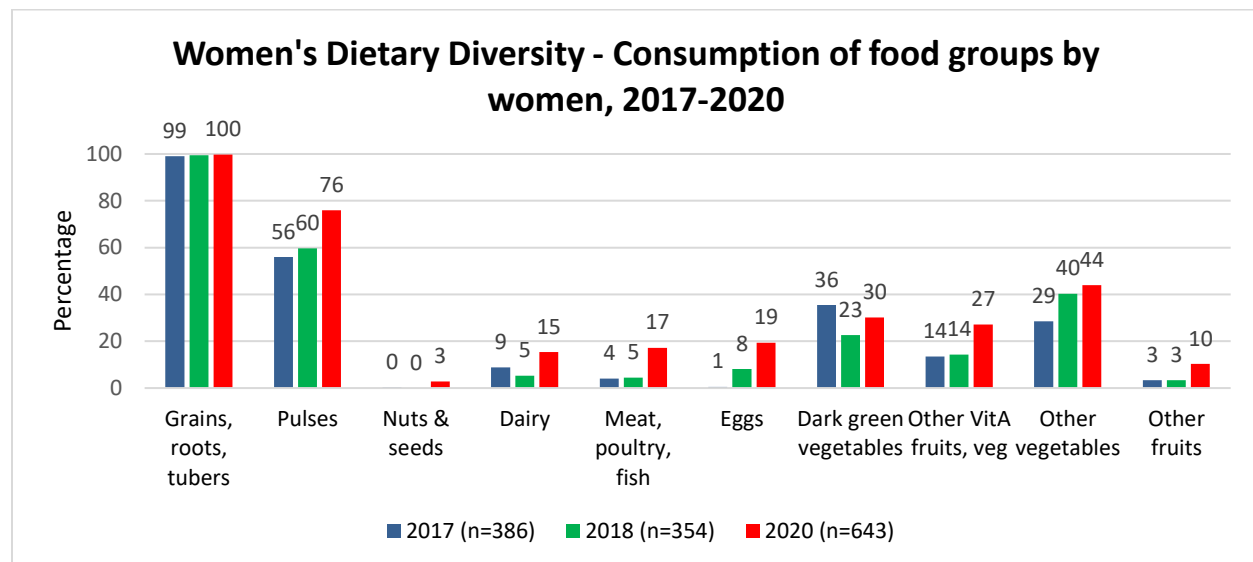
Child Level Outcomes		2017	2018	2020	P-value^
<b>Early initiation of breastfeeding</b> under six months		73.1% (49/67)	62.5% (5/8)	66.5% (36/55)	0.439
<b>Exclusive breastfeeding</b> under six months		98.5% (66/67)	87.5% (7/8)	92.7% (51/55)	0.109
<b>Mean # of food groups</b> from a maximum of 7 food groups for children 6 to 23 months of age		2.2 (201)	2.2 (140)	2.9 (101)	
<b>Child minimum dietary diversity</b> (4 food groups or more for children 6 to 23 months)		12.4% (25/201)	18.9% (28/140)	34.0% (34/100)	0.000*
<b>Minimum Meal Frequency</b> (Child receives solid, semi-solid, or soft foods (but also includes milk for non-breastfed children) the minimum number of times or more over the previous day)	6 to 8 months breastfed	70.3% (26/37)	96.2% (25/26)	66.7% (14/21)	0.776
	9 to 23 months breastfed	73.6% (106/144)	86.6% (71/82)	82.2% (60/73)	0.159
	6 to 23 months non-breastfed	45.0% (9/20)	90.9% (10/11)	43% (3/7)	0.922
	6 to 23 months (all)	70.1 (141/201)	89.1 (109/119)	76.2% (77/101)	0.265
<b>Minimal Acceptable Diet</b> (all 6-23 months old who meet minimum dietary diversity and minimum meal frequency)		11.9% (24/201)	21.0% (25/119)	30.7% (31/101)	0.000*
^Statistical analysis for p-value compares 2020 to 2017 due to varying independence of 2018 sample					
* p-value $\leq 0.05$ is statistically significant					

## Women

Mother's dietary diversity is measure to reflect a mother's access to a variety of foods and the nutritional adequacy of the mother. It is a dichotomous indicator of whether or not women 15–49 years of age have consumed at least five out of ten defined food groups the previous day or night.

**Food Groups Consumed** – The mean number of food groups consumed by women in the MVHHs increased slightly from 2.5 food groups in 2017 to 3.4 food groups in 2020. Almost all food groups showed an increase in consumption by women, except for dark green vegetables, which decreased from 36% in 2017 to 30%, despite being the third most common food group consumed by women in 2020. Otherwise, the food group with the highest increase was pulses (beans, peas, lentils, etc), which increased from 56% in 2017 to 76%. The next food group with the second highest increase was eggs, which increased from 1% to 19%. Notably, despite very few children eating meat or flesh products, women reported having higher access to meat, poultry, or fish products with 17.2% of households consuming those foods. This could indicate that when households are able to access meat products, they are prioritizing meat for consumption by women or mothers, rather than giving them to children. If so, this could indicate that the importance of dietary diversity, particularly of pregnant or breastfeeding women, is understood among families and is resulting in adoption of healthy practices in homes.

**Figure 4. Consumption of ten food groups by women in MVHHs**



### Minimum Dietary Diversity – Women (MDD-W)

Women of reproductive age (15–49 years) are at risk of multiple micronutrient deficiencies, which can endanger their health and ability to carry out day-to-day routine activities including care for their children and to partake in income- generating activities.

A woman of reproductive age is considered to meet a minimum dietary diversity if she consumed at least five of 10 specific food groups within the previous 24 hours. Table 14 presents the reported dietary diversity of women in the MVHHs. The percentage of women who consumed at least five out of 10 food groups was 18% in 2020. When comparing just Cohort 1 results to their previous reported minimum dietary diversity, the percent of women who report meeting the minimum dietary diversity increased from 2% in 2017 to 16% in 2020. This is a statistically significant increase ( $p<0.001$ ), indicating that project activities have possibly contributed to increased access

to diverse foods and are also encouraged adoption of healthy nutritional practices in homes. This is also supported by the 98% of respondents in 2020 who reported that they believed the project was the reason for the positive changes in their diets.

Iron folate supplementation among pregnant women is also measured through the survey. Among Cohort 1, the proportion of women, who had been pregnant in the last 2 years, who received iron folate supplements at least once during their pregnancy was 75% in 2020, increasing from 71% in 2017. Comparatively, the proportion of women who received iron and folic acid (IFA) supplementation for at least 3 months during pregnancy decreased to 28% in 2020. This is lower than the proportion reported in 2017, when 33% of women reported receiving IFA supplementation for at least 3 months. Despite this, as reported earlier in this report, participation in ECCs is significantly associated with IFA uptake. Thus, pregnant women should be encouraged to participate regularly in ECCs to improve awareness and create a supportive environment to encourage uptake of IFA and improve availability of supply in health facilities where there is the need.

**Table 17. Dietary Diversity among Women in MVHHs,**

Women Level Outcomes		2017	2018	2020	2020 Cohort 1 only	Level of sig (P-value)
<b>Mean # food groups consumed from 10 food groups</b>		2.5 groups (386)	2.6 groups (354)	3.4 groups (643)	3.3 (307)	
<b>Minimum dietary diversity</b> (5 food groups or more)	<b>Inadequate:</b> 4 food groups or less	97.6 (377/386)	91.5 (324/354)	82.1% (528/643)	84% (258/307)	.000*
	<b>Adequate:</b> 5 food groups or more	2.4% (9/386)	8.5 (30/354)	17.9% (115/643)	16.0% (49/307)	
<b>Proportion of pregnant women who took IFA supplement at least once</b> (pregnant in last 2 years)		70.8% (209/295)	70.7% (128/181)	78.1% (157/201)	74.7% (71/95)	.031*
<b>Proportion of women received iron and folic acid (IFA) supplementation for at least 3 months during pregnancy</b>		32.5% (68/209)	40.6% (52/128)	26.8% (42/157)	28.2% (20/71)	.116
<b>Proportion of women who reported the change in dietary diversity was a positive change</b>		N/A	68.3% (243/356)	79.5% (511/643)	77.2% (237/307)	.013* (2018 to 2020)
<b>Proportion of women who believe Growth through Nutrition is involved in some way with change in dietary diversity</b>		N/A	96.1% (244/254)	97.6% (519/532)	98% (240/245)	.414 (2018 to 2020)
* $p\text{-value} \leq 0.05$ is statistically significant						

**Women's Work Load –** When asked how many hours, on average, women spend on work that generates an income for the household, 91% of respondents (597 of 656) reported that they worked about 5.2 hours a day to generate income for their household. The majority of women (about 85%)

spend between 2 to 6 hours a day, on average, on household-related work as well as non-food and non-child care chores, such as fetching water or firewood. The average number of hours women spend on household-related work and non-food or non-child care work remained comparatively consistent since 2017, and ranged from less than 2 hours to up to 10 hours of work a day. In 2020, more women reported working more than 10 hours a day on household-related work, increasing from 0.3% in 2017 to 4%. Women also reported working, on average, 7 months out of the year to generate income for their households.

**Table 18. Work Load of Women in MVHHs**

<b>Women's Work Load</b>		<b>2017</b>	<b>2018</b>	<b>2020</b>
<b>Number of hours each day, on average, of work to generate income either in cash or in kind?</b>	<b>Range</b>	0 – 11 hrs (386)	0 – 12 hrs (357)	0-12 hrs (656)
	<b>Mean</b>	4.8 hrs (386)	5.8 hrs (357)	5.2 hrs (656)
<b>Number of hours each day, on average, worked related to the household, especially on food preparation, serving and child/self-care</b>	<b>&lt;2 hrs</b>	13.5% (52/386)	3.4% (12/354)	11.6% (76/656)
	<b>2-4 hrs</b>	45.1% (174/386)	48.3% (171/354)	44.8% (294/656)
	<b>5-6 hrs</b>	28.2% (109/386)	36.7% (130/354)	28.8% (189/656)
	<b>7-8 hrs</b>	11.1% (43/386)	9.9% (35/354)	9.9% (65/656)
	<b>9-10 hrs</b>	1.8% (7/386)	0.8% (3/354)	1.1% (7/656)
	<b>&gt;10 hrs</b>	0.3% (1/386)	0.9% (3/354)	3.6% (24/656)
<b>Number of hours spent each day, on average, on non-food and non-child care related household chores such as water fetching, firewood collection, cleaning, procurement of food items, marketing and others?</b>	<b>&lt;2 hrs</b>	14.2% (55/386)	18.6% (66/354)	18.4% (121/656)
	<b>2-4 hrs</b>	49.2% (190/386)	43.5% (154/354)	39.2% (257/656)
	<b>5-6 hrs</b>	33.2% (128/386)	30.5% (108/354)	32.2% (211/656)
	<b>7-8 hrs</b>	3.4% (13/386)	7.3% (26/354)	7.2% (47/656)
	<b>9-10 hrs</b>	0.0% (0/386)	0.0% (0/354)	2.3% (1/656)
	<b>&gt;10 hrs</b>	0.0% (0/386)	0.0% (0/354)	0.8% (5/656)
<b>Number of months in a year spent working to generate income either in cash or in kind?</b>	<b>Range</b>	Not asked	0 – 11 months (357)	0-12 months (656)
	<b>Mean</b>	Not asked	6.2 months (357)	7.0 months (656)

Women's Decision-Making – Women's decision making is a key gender indicator monitored by the project, as the project's activities are designed and implemented to promote gender equality and women's empowerment. In 2020, the proportion of women who make nutrition or food decisions by themselves or with their husbands increased, with decision-making power shifting



from women making decisions by themselves to making decisions jointly with their husbands. For decision making on household income expenditures, the percent of women who make decisions alone decreased from 28% in 2017 to 20% in 2020 while the percent of women who make decisions jointly with their husband increased from 55% in 2017 to 70% in 2020 (*See Appendix Table 33*). The percent of respondents who reported their husband makes decisions alone about expenditures decreased from 12% to 6%.

For decision making on food purchases, the proportion of women who make decisions alone decreased from 62% in 2017 to 37% in 2020, while the percent of women who reported making decisions on food purchases jointly with their husband increased from 32% to 56%. Similarly, the proportion of women who reported making joint decisions with their husbands on the types of foods consumed increased from 21% in 2017 to 35% in 2020.

For decision-making on husband's or wife's income, a little more than half of female respondents reported making decisions jointly with their husband. Interestingly, in 2020, more women reported making decisions by themselves on husband's income than in previous years, increasing from 2% to 9% while joint decision-making increased from 52% to 58%. For women's income, the percent of women who make decisions by themselves decreased slightly from 41% in 2017 to 38% while the percent of women who make decisions jointly with their husband increased from 52% to 57%.

## **Limitations**

The follow-up survey was conducted in February and March of 2020 while previous surveys were conducted in October and November, considered a lean harvest season. February and March are not productive seasons and households typically experience less food insecurity during this season so the seasonal effects of the timing of data collection may affect comparability of data to previous years. Response bias is likely to be present with respondents from Cohort 1 as some respondents may be able to anticipate questions from previous years and offer answers they believe data collectors want to hear. Recall bias may also affect data pertaining to the previous day and year. The number of households from Cohort 1 with recently pregnant women and children under 2 was significantly lower in 2020 compared to baseline. Thus, comparisons between 2020 and baseline findings in select maternal health indicators should be interpreted cautiously, as the unequal variance between samples results in a loss in statistical power. As children from Cohort 1 aged out of the cohort, findings for IYCF indicators are mainly from the new cohort of households, named Cohort 2. Thus, differences in 2020 data and previous years' data cannot be interpreted as improvements in the same households. Due to the relatively small sample size, caution should be exercised in generalizing survey results to the regional level or to woredas that are outside the Growth through Nutrition intervention areas. Lastly, the income data is not adjusted for purchasing power

## **DISCUSSION AND RECOMMENDATIONS**

The Growth through Nutrition package of support to MVHHs includes agriculture, health, SBCC and WASH. The investments are aimed to increase utilization of nutrition specific and nutrition



sensitive interventions which are ultimately meant to improve nutritional status of women and children in project implementation regions. In the course of implementation, the project conducts periodic surveys to evaluate project interventions targeting MVHHs, to elucidate the project's influence in improving key selected process and outcome level indicators. The surveys serve as a tool to systematically generate evidence on project implementation and to monitor any changes in health behaviors practiced in households that are expected to contribute to the improvement of nutrition and health for children, pregnant and lactating women, with a focus on the first 1000 days of life.

In 2018, due to respondent attrition and children aging out of the sample, the number of households in the first cohort interviewed and followed from baseline decreased and was too small to adequately assess key IYCF indicators of interest. Findings from 2018, particularly related to IYCF or maternal indicators, are not comparable to baseline results due to the unequal sample sizes. Therefore, most of the analysis completed in this survey compares results from the 2020 survey to the baseline, to assess current progress in achieving project goals. Most of the key outputs or outcome level indicators exhibited improvements between baseline and the 2020 follow-up survey. The key indicators that were assessed among the two cohorts are summarized and discussed into two levels (household and individual) below.

#### **Household level outcomes:**

**Income:** Overall, household income levels among MVHHs has increased considerably since the baseline. The percentage of households that earn an income from their own production increased from 60% to 91% and the percentage of households that earn an income from sources other than agriculture increased from 60% to 80%. Notably, the percentage of MVHHs who reported income from the sale of production supported by the project increased significantly from 2% in 2017 to 83% in 2020. Income from the sale of own production (vegetable products, live animals, and animal products) more than doubled when comparing only Cohort 1 MVHHs to previous surveys, showing that more households are able to successfully cultivate agricultural products, as a result of the project's support, and improve their own livelihoods. While overall income earned increased, the proportion of households reporting having no income the past year increased from 2.2% in 2018 to 9.8% in 2020 while household hunger decreased substantially. This is likely related to households choosing to use their vegetable and animal products for household consumption rather than as an income source, thus reducing their food gap and household hunger, but not increasing household income.

**HH Hunger:** Household hunger has gradually decreased among MVHHs since the baseline, with the percent of households reporting having experienced moderate or severe hunger in the past month decreasing from 48% to 11%. Similarly, the proportion of households that reported being able to cover the food consumption over the last year increased from 35% in 2017 to 43% in 2018 and a smaller proportion of households reported experiencing food gaps throughout the year. With the increase in household income due to the sale of agricultural products and increased household expenditures on foods, the findings from this year's survey show that the support to MVHHs to improve their agricultural productivity is effectively reducing household hunger among MVHHs.

The reduction in household hunger and increased expenditures in food are likely to have a positive impact on the positive changes reported in dietary diversity among women and children

**WASH:** The project's household-level WASH interventions are focused on reducing the prevalence of diarrheal disease and potential effects of environmental enteropathy among children, one of the causes of childhood undernutrition. The survey found positive improvements the proportion of households that report having a handwashing facility at home and washing hands with water and soap or ash/endod. Interestingly, there was a greater change in the proportion of households that wash with Endod specifically, indicating some local preference over the use of soap. Though not statistically significant, there was an increase in the proportion of households that reported practicing handwashing at all critical times, from 18% in 2017 to 23% in 2020. When observing specific handwashing practices however, there was a statistically significant increase in household's handwashing after toilet use, after cleaning children after defecation, before serving a meal, and after eating. The times when households report handwashing the least are still 1) after cleaning child following defecation (43% in 2020) and 2) before feeding a child (41%). This indicates that while household respondents understand the importance of handwashing for their own health, that education and SBCC around the importance of handwashing while caring for children could be strengthened. Additionally, the availability of water at handwashing facilities was low, highlighting the need to improve availability of water and soaps among households to create a hygiene friendly environment to support the uptake of handwashing behaviors.

**Household decision-making:** In addition to nutrition and livelihoods support activities, Growth through Nutrition also implements crosscutting activities to promote gender equality and women's empowerment as gender norms are a key influencing factor of nutritional practices and outcomes. Therefore, equal decision-making power in households is an important indicator that the assessment measured to monitor the impact of the project's gender strategy. In general, both female and male residents from the surveyed MVHHs reported an increase in making decisions jointly with their spouse, when compared to responses in 2017. The increases in the proportion of women who reported making decisions jointly with their husbands was mostly a result of a decrease in the proportion of women who previously made these decisions alone. This topic requires further exploration to ensure that male involvement efforts do not have unintended negative consequences related to women's autonomy.

Interestingly, when men from the same households were asked about decision making power, more men consistently reported making joint decisions with their wives than the female respondents in all three assessments. For example, in 2020, 85% of male respondents reported making decisions about household expenditure jointly with their wives, compared to 69% of women from the same households who reported making joint decisions with their husbands about household expenditures. The variance in how husbands and wives perceive decision making in the household is a dynamic that needs further assessment and exploration to understand the gendered power balance and if and how this may impact nutritional practices.

### **Individual level outcomes**

**Child outcomes:** Child dietary diversity (the proportion of children who consume four or more food groups) has significantly increased since the baseline. The improvements are attributed to the significance increase in consumption of eggs, dairy products, and Vitamin A foods, which is a key part of the SBCC support provided to MVHHs. The livelihood and SBCC support to MVHHs are effectively reaching and improving household practices, and therefore likely to have an impact on nutrition outcomes.

Notably, while minimum dietary diversity improved, the proportion of households that report early initiation of breastfeeding and exclusive breastfeeding has marginally decreased since the baseline. Conversely, there was an increase in the proportion of women who reported uptake of exclusive breastfeeding as a result of receiving health information, which contradicts the decreasing trend of actual breastfeeding practices reported. This finding requires additional exploration through qualitative approaches to understand if this is a result of response bias or if certain households are more inclined to adopting new behaviors than others. Nonetheless, these results indicate the need to strengthen antenatal nutrition counseling to improve early initiation and exclusive breastfeeding.

**Women & maternal outcomes:** Minimum dietary diversity of women (proportion of women consuming five or more food groups) has increased significantly since the baseline, from 2% to 18%. Similar to the dietary diversity of children, the increased dietary diversity among women is due to the increased consumption of dairy, eggs, vegetables, meat, and pulses. While in previous years, changes in dietary diversity among women were minimal due to the assumption that households favor the nutritional needs of children, this finding shows that mothers' and women's dietary diversity is being prioritized in households. The proportion of pregnant women who receive iron folate supplementation at least once has improved, but the proportion that receive supplementation for at least 3 months during pregnancy decreased slightly, highlighting the need to ensure women receive continued support during pregnancy, both in terms of addressing behavioral and supply related issues. Interestingly, while more women reported uptake of certain IYCF behaviors as a result of receiving health information compared to the baseline, such as exclusive breastfeeding or continued, there was a decreasing trend in the number of women who reported exclusive breastfeeding overall. These conflicting findings require additional follow-up to understand if they are related to response bias, sample size, or if certain women are adopting behaviors of interest.

### **Influence of project support on select nutrition and WASH indicators**

The findings from the 2020 survey generally showed improvements compared to baseline, indicating that there has been a change in nutrition, livelihood, and WASH practices in MVHHs. To understand whether the project's activities have affected the observed change, the assessment conducted analysis to understand if exposure to ECCs, savings groups, or direct technical support visits were associated with the improved practices. Overall, the only indicator that was significantly associated by one activity was IFA uptake among pregnant women, which was shown to be significantly associated with participation in ECC activities. For other indicators, such as MDD among women and children, exclusive breastfeeding, and raising chicken, there were no significant associations with any one activity. However, as there were statistically significant changes in the proportion of households practicing select behaviors compared to 2017, it can be assumed that the support that MVHHs are receiving are encouraging behavior change. Not one

activity alone, such as ECC or savings groups, predicts behavior change, but rather that exposure to multiple activities increase the likelihood of behavior change. Further data analysis along with comparison to a control group that hasn't received any project support would be required to assess the effect of the project's activities on observed improvements in health behaviors or outcomes.

## **Recommendations**

**Agriculture & Livestock support:** Overall, the proportion of MVHHs that currently raise livestock has reduced, but the total number of livestock have increased, indicating that when households are able to maintain livestock that they are able to grow the number of livestock raised. However, the decrease in the number of households that raise livestock, particularly sheep and chicken, indicates that there needs to be additional support to understand and address the challenges that some households may be facing in raising these type of livestock and if the reduction is voluntary (i.e. households choosing to sell or eat chickens and sheep) or if there are other reasons for the reduction in livestock. Additionally, the assessment showed that household hunger is generally improving, with more households reporting experiencing little to no hunger, the proportion of households that still report experiencing severe hunger remains the same. This indicates that the most vulnerable of households are still struggling to meet their food needs and require more targeted support compared to other households. Continued mentorship, coaching, and support to MVHHs in their income generating activities is critical to ensure households can sustain their agricultural productivity and meet their consumption and economic needs.

**SBCC for WASH and IYCF:** Most respondents indicated improved practices in handwashing, though there are still critical times when households are failing to practice handwashing. SBCC activities should strengthen messaging and support around handwashing at critical time points, specifically after cleaning children following defecation/toilet use and before feeding children, as these times impose health risks to children and are when the least amount of respondents are remembering to practice handwashing. While the proportion of women who reported receiving IFA supplementation at least once in pregnancy increased, the proportion of women who received IFA supplementation for at least 3 months decreased, showing that continued support throughout pregnancy needs to be strengthened. SBCC activities and antenatal care counseling for pregnant women and parents should strengthen counseling on breastfeeding practices, handwashing and childcare, and maternal nutrition throughout pregnancy. The assessment also highlighted which sources of information could be better utilized as SBCC platforms to reach households. HEWs were the most common source of information on MNCH and nutrition issues and are an important cadre to continue supporting to share nutrition information with households. Households have access to diverse channels of information now, including HEWs, health providers, savings groups, and DAs, which are all important to creating an enabling environment for behavior change. However, DAs are not a common resource for MVHHs as fewer respondents identified DAs as a source of health information and the role of DAs in communities seem to be shifting. Project resources should shift to focusing on DAs roles to support agronomic practices instead and support HEWs as an additional health resource to strengthen more commonly used platforms to deliver health and nutrition SBCC to MVHHs. Similarly, radio and mobile phone coverage is not as high

as expected among the households, indicating that any radio and mobile phone-based SBCC will not be as effective.

**Support for WASH:** While handwashing practices have generally improved, only half of respondents reported washing their hands with soap, less than 30% of households have a washing facility at home, and less than 40% of households with a handwashing facility have soap or water available. Currently, 90% of households report their water facilities being located near the latrine, which may be too inconvenient for individuals to access before feeding or caring for their children, which are the times when handwashing is practiced least. The assessment shows that households require additional support to improve the availability and accessibility of water and soap, so that it is easier for them to wash their hands when needed.

**Addressing nutrition-related gender inequality:** The assessment found that more women are spending more than 10 hours on household related work (especially food preparation and childcare) than compared to previous years, while the proportion of women working between 2-10 hours has remained relatively consistent since 2017. The factors related to this increase were not captured in this assessment, thus close monitoring and follow-up is needed to explore if the increase in farming activities has any unintended effects on household work for women. Additionally, joint decision making between couples has reportedly increased, which may indicate improvements in male involvement in nutrition & food related decisions at the household level, one of the key messages of ECCs. Interestingly, more men reported joint decision making is occurring compared to women, which could indicate men and women have different perceptions of what “joint decision making” is. This requires further exploration by the project in monitoring activities, as well as through the ECCs to understand how men are becoming involved in nutrition & health conversations and if these discussions are actually distributing decision-making power and transforming norms.

**Dietary Diversity for Women and Children:** For both women and children, dietary diversity has improved since baseline. However, overall the proportion of households reporting adequate minimum dietary diversity for women and children still remains low, at 31% for children and 16% for women. For children, consumption of flesh foods, dairy products, and Vitamin A foods is relatively low. While for women, consumption of dairy, meat/poultry/fish, eggs, and dark green vegetables is low. Activities to increase access to these food groups, or improve awareness on how to prepare these foods could be strengthened to support households to increase dietary diversity.

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## ANNEX 1: ADDITIONAL DATA TABLES

**Table 19: Background Characteristics of Household Respondents**

Respondent Characteristics		Baseline 2017	Follow-Up 2018	Follow Up 2020 All Cohort	Follow Up 2020 Cohort 1	Follow Up 2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
<b>Gender</b>	Female	100 (386/386)	99.2 (354/357)	94.4 (619/656)	94.4 (301/319)	94.4 (318/337)
	Male	0.0 (0/386)	0.8 (3/357)	0.3 (2/656)	0.6 (2/319)	0 (0/337)
<b>Age in Years</b>	Mean	30.8 yrs (386)	31.6 yrs (357)	32.2 (621)	32.7 (303)	31.7 (318)
	Median	31.0 yrs (386)	31.0 yrs (357)	32 (621)	32 (303)	31 (318)
	Range	18 – 50 yrs (386)	18 – 52 yrs (357)	18-55 yrs (621)	18-55 yrs (303)	18-50 yrs (318)
<b>Age Group</b>	<15 yrs	0.0 (0/386)	0.0 (0/357)	0 (0/656)	0 (0/319)	0 (0/337)
	15 – 19 yrs	2.1 (8/386)	1.4 (5/357)	0.5 (3/656)	0.3 (1/319)	0.6 (2/337)
	20 – 50 yrs	97.9 (378/386)	98.3 (351/357)	93.1 (611/656)	92.5 (295/319)	93.8 (316/337)
	>50 yrs	0.0 (0/386)	0.3 (1/357)	1.1 (7/656)	2.2 (7/319)	0 (0/337)
<b>Relation Head Household to of</b>	Head of household	15.5 (60/386)	15.2 (54/357)	14.5 (95/656)	14.7 (47/319)	14.2 (48/337)
	Wife/ husband	81.1 (313/386)	80.6 (287/357)	78 (512/656)	78.4 (250/337)	77.7 (262/337)
	Son/ daughter	2.6 (10/386)	3.4 (12/357)	2.1 (14/656)	1.9 (6/319)	2.4 (8/337)
	Grand parent	0.3 (1/386)	0.3 (1/357)	0 (0/656)	0 (0/319)	0 (0/337)
	Brother/ sister	0.5 (2/386)	0.3 (1/357)	0 (0/656)	0 (0/319)	0 (0/337)
	Not related	0.0 (0/386)	0.3 (1/357)	0 (0/656)	0 (0/319)	0 (0/337)
<b>Marital status</b>	Never married	0.5 (2/386)	1.7 (6/357)	1.1 (7/656)	1.3 (4/319)	0.9 (1/337)
	Married/ living together	85.0 (328/386)	84.0 (300/357)	80 (525/656)	80.6 (257/319)	79.5 (268/337)
	Divorced	5.2 (20/386)	5.9 (21/357)	7.5 (49/656)	6.6 (21/319)	8.3 (28/337)
	Separated	3.4 (13/386)	3.9 (14/357)	1.4 (9/656)	0.9 (3/319)	1.8 (6/337)
	Widow	6.0 (23/386)	4.5 (16/357)	4.7 (31/656)	5.6 (18/319)	3.9 (13/337)
<b>Level of Education</b>	No education	65.8% (254/386)	66.4 (n=237)	60.5 (397/656)	62.7 (200/319)	58.5 (197/337)

	Adult education/literate	1.6% (6/386)	0.6 (n=2)	0.6 (4/656)	0.6 (2/319)	0.6 (2/337)
	Preschool	0.3% (1/386)	0.3 (1/357)	0.3 (2/656)	0.3 (1/319)	0.3 (1/337)
	Primary	27.5% (106/386)	26.9 (96/357)	29.7 (195/656)	27.6 (88/319)	31.8 (107/337)
	Secondary	4.4% (17/386)	5.9 (21/357)	3.4 (22/656)	3.4 (11/319)	3.3 (11/337)
	Technical/vocational	0.5% (2/386)	0.0 (0/357)	0.2 (1/656)	0.3 (1/319)	0 (0/337)
<b>Physically able to manage farm activities/tend livestock</b>	Yes	97.2% (n375)	97.5 (348/357)	93 (610/656)	93.1 (297/319)	92.9 (313/337)
	No	2.3% (n=9)	2.5 (9/357)	1.5 (10/656)	1.9 (6/319)	1.2 (4/337)
	D/K	0.5% (n=2)	0.0 (0/357)	0 (0/656)	0 (0/319)	0 (0/337)

**Table 20: Household Characteristics of panel households interviewed**

Household Characteristics	Number in HH	2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
Size of household	1	0.0 (0/386)	0.3 (1/357)	0.3 (2/656)	0.6 (2/319)	0 (0/337)
	2	1.8 (7/386)	2.5 (9/357)	2 (13/656)	1.9 (6/319)	2.1 (7/337)
	3	12.7 (49/386)	10.6 (38/357)	11.6 (76/656)	9.4 (30/319)	13.6 (46/337)
	4	18.9 (73/386)	19.9 (68/357)	21.1 (139/656)	21 (67/319)	21.4 (72/337)
	5	20.7 (80/386)	20.2 (72/357)	20.4 (13/656)	20.1 (64/319)	20.8 (70/337)
	6	17.4 (67/386)	18.2 (65/357)	20.4 (134/656)	20.4 (65/319)	20.5 (69/337)
	7	16.6 (64/386)	15.7 (56/357)	11.9 (78/656)	12.2 (39/319)	11.6 (39/337)
	8	8.5 (33/386)	9.0 (32/357)	9.1 (60/656)	9.7 (31/319)	8.6 (29/337)
	9	2.8 (11/386)	2.8 (10/357)	2.3 (15/656)	3.8 (12/319)	0.9 (3/337)
	10	0.5	1.7	0.6	0.6	0.6



		(2/386)	(6/357)	(4/656)	(2/319)	(2/337)
	>10	0.0 (0/386)	0.0 (0/357)	0.2 (1/656)	0.3 (1/319)	0 (0/337)
Mean hh size:		5.4 (386)	5.5 (357)	5.3 (656)	5.5 (319)	5.2 (337)
Median hh size:		5.0 (386)	5.0 (357)	5.0 (656)	5.0 (319)	5.0 (337)
Range of hh sizes:		1-10 (386)	1 – 10 (357)	1 – 11 (656)	1 – 11 (319)	1 – 10 (337)
Household Demographic						
301 Demographic type of household	Adult Female & No Adult Male	17.1 (66/386)	15.1 (54/357)	16.3	17.6	15.1
				(107/656)	(56/319)	(51/337)
	Adult Male & No Adult Female	0.3 (1/386)	0.3 (1/357)	2	2.8	1.2
				(13/656)	(9/319)	(4/337)
	Male & Female Adults	82.6 (319/386)	84.6 (302/357)	81.7	79.6	83.7
				(536/656)	(254/319)	(282/337)
307 Pregnant or lactating woman in household	Yes	83.2 (321/386)	66.9 (237/354)	47.1	47.3	46.9
				(309/656)	(151/319)	(158/337)
	No	16.8 (65/386)	33.1 (117/357)	52.4	52	52.8
				(344/656)	(166/319)	(178/337)
308 Children less than 2 years of age	Yes	71.8 (277/386)	48.5 (173/357)	24.5	25.4	23.7
				(161/656)	(81/319)	(80/337)
	No	28.2 (109/386)	51.5 (184/357)	75.5	74.6	76.3
				(495/656)	(238/319)	(257/337)

**Table 21: Household Hunger & Food Insecurity**

Hunger and Food Insecurity		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
Q303. Household was able to cover food consumption last year	Yes	35.2 (136/386)	28.3 (101/357)	43.3 (284/656)	43.3 (138/319)	43.3 (146/337)
	No	63.8 (250/386)	71.7 (256/357)	56.7 (372/656)	56.7 (181/319)	56.7 (191/337)
Q304. If NO, # of months food gap	Mean	3.2 months (250)	3.4 months (256)	3.4 months (371)	3.5 months (181)	3.5 months (190)
	Median	3 months (250)	3 months (256)	3 months	3 months	3 months
	Range	1 – 8 months (n=250)	1 – 12 (n=256)	1 – 12	1 – 12	1 – 12
January		6.4	7.0	2.6	2.8	2.4

Q305 Months of food gap		(250)	(256)	(371)	(181)	(190)
	February	6.8 (250)	11.7 (256)	1.7 (371)	2.2 (181)	1.2 (190)
	March	5.6 (250)	9.0 (256)	2.6 (371)	2.5 (181)	2.7 (190)
	April	15.2 (250)	14.1 (256)	5 (371)	5.6 (181)	4.5 (190)
	May	27.2 (250)	17.6 (256)	7.9 (371)	8.8 (181)	7.1 (190)
	June	41.2 (250)	32.0 (256)	21.9 (371)	23.8 (181)	20.2 (190)
	July	63.2 (250)	58.6 (256)	38.6 (371)	37.9 (181)	39.5 (190)
	August	72.4 (250)	72.7 (256)	43.2 (371)	42.3 (181)	44.2 (190)
	September	52.4 (250)	64.1 (256)	36.5 (371)	37 (181)	36.2 (190)
	October	22.8 (250)	34.4 (256)	19.9 (371)	19.1 (181)	20.8 (190)
	November	6.8 (250)	10.9 (256)	8.1 (371)	8.8 (181)	7.4 (190)
	December	4.0 (250)	7.0 (256)	4.9 (371)	6 (181)	3.9 (190)
Q501 Household Hunger Categories	Little to no hunger	71.0 (274/386)	66.1 (236/357)	91.0 (597/656)	89.3 285/319	92.6 312/337
	Moderate Hunger	27.0 (104/386)	31.9 (114/357)	7.8 (51/656)	9.1 29/319	6.5 22/337
	Severe Hunger	2.1 (8/386)	2.0 (7/357)	1.2 (8/656)	1.6 5/319	0.9 3/337

**Table 22: Child Diet Diversity**

Child Diet Diversity (6 – 23 months of age)	# of Food groups	2017	2018	2020 All Cohort
		% (n)	% (n)	% (n)
Boys	0	1.0 (0/102)	0.0 (0/74)	7.0 (3/43)
	1	12.7 (13/102)	6.8 (5/74)	11.6 (5/43)
	2	37.3 (38/102)	41.9 (31/74)	18.6 (8/43)
	3	36.3 (37/102)	32.4 (24/74)	25.6 (11/43)
	4	11.8 (12/102)	14.9 (11/74)	14 (6/43)
	5	1 (1/102)	2.7 (2/74)	14 (6/43)
	6	0 (0/102)	0 (0/74)	7 (3/43)

	7	0 (0/102)	1.4 (1/74)	2.3 (1/43)
	<b>Mean</b>	<b>2.5</b>	<b>2.7</b>	<b>3.1</b>
<b>Girls</b>	0	ND	ND	3.8 (2/52)
	1	9.1 (9/99)	6.8 (6/74)	3.8 (2/52)
	2	43.4 (43/99)	40.5 (30/74)	30.6 (16/52)
	3	33.3 (33/99)	37.8 (28/74)	26.9 (14/52)
	4	13.1 (13/99)	12.2 (9/74)	26.9 (14/52)
	5	1 (1/99)	0 (0/74)	5.8 (3/52)
	6	0 (0/99)	1.4 (1/74)	1.9 (1/52)
	<b>Mean</b>	<b>2.5</b>	<b>2.6</b>	<b>2.9</b>
<b>Boys and Girls</b>	0	0.5 (1/201)	0.0 (0/148)	6.9 (7/101)
	1	10.9 (22/201)	7.4 (11/148)	6.9 (7/101)
	2	40.3 (81/201)	42.1 (61/148)	26.7 (27/101)
	3	34.8 (70/201)	35.1 (52/148)	25.7 (26/101)
	4	12.4 (25/201)	13.5 (20/148)	19.8 (20/101)
	5	1.0 (2/201)	1.4 (2/148)	8.9 (9/101)
	6	0.0 (0/201)	0.7 (1/148)	4 (4/101)
	7	0.0 (0/201)	0.7 (1/148)	1 (1/101)
	<b>Mean</b>	<b>2.5</b>	<b>2.7</b>	<b>2.9</b>

**Table 23: Ownership of land and off farm activities & knowledge of beneficiary selection criteria**

Land, farm, and beneficiary selection criteria		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
309 Proportion of households that own a plot of land for on-farm activities		91.2 (352/386)	96.6 (345/357)	93.1 (611/656)	92.2 (294/319)	94.1 (317/337)
Q310 If <b>household owns plot</b> , what do you produce on your land	Vegetables	79.8 (281/352)	89.9 (310/345)	84.0 (551/656)	82.8 (264/319)	85.2 (287/337)
	Fruit	29.0 (102/352)	38.8 (134/345)	25 (165/656)	23.8 (76/319)	26.1 (88/337)
	Grains	92.9 (327/352)	91.0 (314/345)	92.5 (607/656)	89.7 (286/319)	95.3 (321/337)

	Livestock	41.2 (145/352)	49.6 (171/345)	63.6 (417/656)	61.4 (196/319)	65.6 (221/337)
Q311 If <b>household does not own plot</b> , is your household willing to engage in off-farm activities	Yes	76.5 (26/34)	100.0 (12/12)	82.2 (37/45)	84.0 (21/25)	80.0 (16/20)
	No	23.5 (8/34)	0 (0/12)	17.8 (8/45)	16.0 (4/25)	20.0 (4/20)
Q312 Did household have off-farm activities?	Yes	6.7 (26/386)	3.4 (12/357)	5.6 (37/656)	6.6 (21/319)	4.7 (16/337)
	No	93.3 (360/386)	96.6 (345/357)	94.4 (619/656)	93.4 (298/319)	95.3 (321/337)
If yes, what activities?	Church leader	4.0 (1/26)	0 (0/12)	0 (0/37)	0 (0/21)	0 (0/16)
	Day laborer	4.0 (1/26)	0 (0/12)	10.8 (1/37)	14.3 (3/21)	6.3 (1/16)
	Mining	8.0 (2/26)	0 (0/12)	10.8 (4/37)	9.5 (2/21)	12.5 (2/16)
	Petty trade	73.0 (19/26)	66.7 (8/12)	59.5 (22/37)	66.7 (14/21)	50 (8/16)
	Shop (kiosk)	4.0 (1/26)	25.0 (3/12)	0.0 (0/37)	0.0 (0/21)	0.0 (0/16)
	Weaver	8.0 (2/26)	8.3 (1/12)	2.7 (1/37)	4.8 (1/21)	0.0 (0/16)
Q302 .Main source of income	Farming	82.4 (318/386)	73.9 (264/357)	85.5 (561/656)	81.5 (260/319)	89.3 (301/337)
	Daily labor	11.4 (44/386)	19.9 (71/357)	9.5 (62/656)	13.2 (43/319)	5.9 (20/337)
	Food assistance/ Safety net	1.0 (4/386)	0.0 (0/357)	0.0 (0/656)	0.0 (0/319)	0.0 (0/337)
	Petty trade/ “Gullet”	3.4 (13/386)	3.9 (14/357)	2.3 (15/656)	1.5 (10/319)	0.8 (5/337)
	Weaver	0.3 (1/386)	0.0 (0/357)	0.0 (0/656)	0.0 (0/319)	0.0 (0/337)
	Shop (kiosk)	0.3 (1/386)	0.3 (1/357)	0.0 (0/656)	0.0 (0/319)	0.0 (0/337)
	Remittance	0.3 (1/386)	0.6 (2/357)	0.2 (1/656)	0.0 (0/319)	0.3 (1/337)
	Mining	0.8 (3/386)	0.6 (2) /357	0.8 (5/656)	0.6 (2/319)	0.9 (3/337)
	Trading	0.3 (1/386)	0.0 (0/357)	0.8 (5/656)	0.6 (2/319)	0.9 (3/337)
	Other	0.0 (0/386)	0.8 (3/357)	1.1 (7/656)	0.9 (3/319)	1.2 (4/337)
Q306. Household received food or agricultural inputs from source other than SC	Yes	12.7 (49/386)	28.0 (100/357)	11.3 (74/656)	12.9 (41/319)	9.8 (33/337)
Q313. Why do you think you received agriculture / livelihood support	Poor/not enough income/assets	77.5 (299/386)	83.8 (299/357)	91.0 (597/656)	92.8 (296/319)	89.3 (301/337)
	Food gap greater	17.9 (69/386)	11.8 (42/357)	22 (144/656)	21.3 (68/319)	22.6 (76/337)

	than 3 months					
	Have children under 5 years of age	46.6 (180/386)	41.7 (149/357)	60.2 (395/656)	60.2 (192/319)	60.2 (203/337)
	Disabled	1.6 (6/386)	3.1 (11/357)	2.7 (18/656)	3.4 (11/319)	2.1 (7/337)
	Pregnant and/or lactating member	28.8 (111/386)	24.4 (87/357)	33.7 (221/656)	33.2 (106/319)	34.1 (115/337)
	Model women/ active participation in kebele	0.3 (1/386)	1.4 (5/357)	0.0 (0/656)	0.0 (0/319)	0.0 (0/337)
	D/K	3.1 (8/386)	2.0 (7/357)	0.6 (4/656)	0 (0/319)	1.2 (4/337)
Q314 Beneficiary selection criteria were clearly communicated to you, community, beneficiaries	Yes	75.1 (290/386)	89.4 (319/357)	82.8 (543/656)	81.5 (260/319)	84 (283/337)
	No	22.3 (86/386)	3.6 (13/357)	13.3 (87/656)	13.2 (42/319)	13.4 (45/337)
	D/K	2.6 (10/386)	7.0 (25/357)	4 (26/656)	5.3 (17/319)	2.7 (9/337)

**Table 24. Livestock owned by the MVHHs**

Q401 Livestock Ownership	2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
	% (n)	% (n)	% (n)	% (n)	% (n)
<b>Sheep</b>					
% of households with own sheep	18.4 (71/386)	12.9 (46/357)	11.6 (76/656)	9.4 (30/319)	13.6 (46/337)
% of households obtained sheep from project	85.0 (328/386)	83.5 (298/357)	66.3 (441/665)	68.7 (219/319)	65.9 (222/337)
Total number of sheep so far / currently	981	739	1,849	855	994
<b>Goats</b>					
% of households with own goats	7.8 (30/386)	6.7 (24/357)	8.2 (54/656)	7.2 (23/319)	9.2 (31/337)
% of households obtained goats from project	10.6 (41/386)	11.8 (42/357)	10.5 (69/656)	6.0 (19/319)	14.8 (50/337)
Total number of goats so far from project / currently have	196	185	378	134	244
<b>Chickens</b>					

% of households with own chickens	28.5 (110/386)	28.3 (101/357)	32.6 (214/656)	28.8 (92/319)	36.2 (122/337)
% of households chickens obtained from project	0.0 (0/386)	89.4 (319/357)	67.7 (444/656)	65.8 (210/319)	69.4 (234/337)
Total number of chickens so far from project / currently have	360	2101 / 1644	2,479	1192	1287
<b>Calves</b>					
% of households with own calves	20.7 (80/386)	18.8 (67/357)	25.6 (168/656)	22.9 (73/319)	28.2 (95/337)
% of households calves obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of calves so far from project / currently have	98	0 / 77	196	NA	NA
<b>Cows</b>					
% of households with own cows	23.1 (89/386)	21.6 (77/357)	33.4 (219/656)	28.5 (91/319)	38 (128/337)
% of households cows obtained from project	0.0 (0/386)	0.3 (1/357)	NA	NA	NA
Total number of cows so far from project / currently have	120	1 / 98	257	103	154
<b>Heifer</b>					
% of households with own heifers	9.1 (35/386)	8.1 (29/357)	16.9 (111/656)	16.3 (52/319)	17.5 (59/337)
% of households heifers obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of heifers from project / currently have	42	0 / 43	118	54	64
<b>Bull</b>					
% of households with own bulls	5.7 (22/386)	7.6 (27/357)	7.9 (52/656)	7.5 (24/319)	8.3 (28/337)
% of households with bulls obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of bulls so far from project / currently have	28	0	60	27	33
<b>Oxen</b>					
% of households with own oxen	22.3 (86/386)	20.4 (73/357)	26.2 (172/656)	24.5 (78/319)	27.9 (94/337)
% of households with oxen obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of oxen so far from project / currently have	121	0 / 116	234	103	131
<b>Mules</b>					
% of households with own mules	0.5 (3/386)	0.6 (4/357)	0.2 (1/656)	0 (0/319)	0.3 (1/337)
% of households with mules obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of mules so far from project / currently have	3	0 / 4	1	0	1
<b>Horses</b>					
% of households with own horses	3.4 (13/386)	3.4 (12/357)	5.3 (35/656)	6.3 (20/319)	4.5 (15/337)
% of households with horses obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA

Total number of horses so far from project / currently have	16	0 / 14	40	22	18
<b>Donkeys</b>					
% of households with no donkeys	14.8 (57/386)	17.4 (62/357)	21.3 (140/656)	16.9 (54/319)	25.5 (86/337)
% of households with donkeys obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of donkeys so far from project / currently have	71	0 / 78	169	65	104
<b>Bee hive</b>					
% of households with no bee hives	4.4 (17/386)	3.4 (12/357)	2.6 (17/656)	0.9 (3/319)	4.2 (14/337)
% of households with bee hives obtained from project	0.0 (0/386)	0.0 (0/357)	NA	NA	NA
Total number of bee hives so far from project / currently have	36	0	53	13	40

**Table 25. Ownership of Selected Household Assets**

Q403 Home Assets & House Structure		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
Radio	No Radios	89.9 (347/386)	89.6 (320/357)	85.7 (562/656)	85.9 (274/319)	85.5 (288/337)
	1	9.6 (37/386)	10.1 (36/357)	14.3 (94/656)	14.1 (45/319)	14.5 (49/337)
	2	0.5 (2/386)	0.3 (1/357)	0 (0/656)	0 (0/319)	0 (0/337)
Mobile Phone	No Mobile Phones	55.7 (215/386)	62.2 (222/357)	52 (341/656)	53.3 (170/319)	50.7 (171/337)
	1	41.7 (161/386)	33.3 (119/357)	41.9 (275/656)	41.1 (131/319)	42.7 (144/337)
	2	2.1 (8/386)	4.5 (16/357)	5.5 (36/656)	5 (16/319)	5.9 (20/337)
	3	0.5 (2/386)	0.0 (0/357)	0.5 (3/656)	0.6 (2/319)	0.3 (1/337)
Residential house roofing material	Grass/Leaf Thatched Roof	43.8 (169/386)	39.5 (141/357)	39.6 (260/656)	37 (118/319)	42.1 (142/337)
	Corrugated Iron Sheets Roof	52.8 (204/386)	58.0 (207/357)	56.9 (373/656)	59.9 (191/319)	54 (182/337)
	Wood with Mud & Stone	1.0 (4/386)	1.1 (4/357)	1.5 (10/656)	0.9 (3/319)	2.1 (7/337)
	Wood & Plastic	0.8 (3/386)	0.6 (2/357)	1.2 (8/656)	1.3 (4/319)	1.2 (4/337)
	Bamboo	1.6 (6/386)	0.8 (3/357)	0.6 (4/656)	0.9 (3/319)	0.3 (1/337)
Residential house wall	Mud & Wood	87.3 (337/386)	91.0 (325/357)	87.8 (576/656)	89 (284/319)	86.6 (292/337)

	Mud & Stone	5.7 (22/386)	3.9 (14/357)	9.1 (60/656)	7.2 (23/319)	11 (37/337)
	Mud Bricks or Burned Bricks	0 (0/386)	1.1 (4/357)	0.2 (1/656)	0 (0/319)	0.3 (1/337)
	Wood	2.1 (8/386)	0.0 (0/357)	1.1 (7/656)	1.6 (5/319)	0.6 (2/337)
	Grass or Bamboo	2.6 (10/386)	2.5 (9/357)	0.2 (1/656)	0 (0/319)	0.3 (1/337)
	Concrete Bricks	2.1 (8/386)	1.1 (4/357)	1.1 (7/656)	1.9 (6/319)	0.3 (1/337)
	Plastic	0.3 (1/386)	0.3 (1/357)	0.3 (2/656)	0.3 (1/319)	0.3 (1/337)
<b>Own separate animal house</b>	Yes	36.0 (139/386)	38.7 (138/357)	43.3 (284/656)	40.8 (130/319)	45.7 (154/337)

**Table 26. Household income by source in the past year**

Sources of Income		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
Q404b. Proportion of households that earned income from production supported by project		1.8 (n=7/386)	64.1 (229/357)	83.4 (547/656)	81.8 (261/319)	84.9 (286/337)
Sale of animal products (in Birr)	% with income from sale of animal products	14.3 (1/7)	39.7% (91/229)	65.8 (360/547)	65.1 (170/261)	66.4 (190/286)
	Mean	500 birr (1)	150 birr (91)	752 birr (360)	771 birr (170)	734 birr (190)
	Median	500 birr (1)	80 birr (91)	751.6 birr (360)	455 birr (170)	410 birr (190)
	Range	500 birr (n=1)	10 – 2500 birr (91)	15-7,280 birr	15-6,000 birr	32-7,280 birr
	Sum for all HHs	500 birr (1)	13,680 birr (91)	270,576 birr (360)	131,058 birr (170)	139,518 birr (190)
Sale of live animal (in Birr)	% with income from sale of live animals	28.6 (2/7)	50.7 (116/229)	74.6 (408/547)	73.6 (192/261)	75.5 (216/286)
	Mean	1125 birr (2)	1,309 birr (116)	2,670 birr (408)	2,767 birr (192)	2,583 birr (216)
	Median	1125 birr (2)	1,050 birr (116)	2,255 birr (408)	2400 birr (192)	2050 birr (216)
	Range	900 – 1350 birr (2)	1 – 6000 birr (116)	100-12,000 birr	100 – 11,600 birr	150 - 12,000 birr
	Sum for all HHs	2250 birr (2)	151,871 birr (116)	1,089,362 birr	531,340 birr	558,022 birr



Sale of vegetable products (in Birr)	% with income from sale of vegetable products	85.7 (6/7)	42.4 (97/229)	32.9 (180/547)	30.7 (80/261)	35 (100/286)
	Mean	2093 birr (6)	265 birr (97)	629 (180)	642 (80)	618 (100)
	Median	150 birr (6)	180 birr (97)	350 birr (180)	400 birr (80)	255 birr (100)
	Range	20 – 11,900 birr (6)	20 – 1400 birr (97)	25- 8,000 birr (180)	30- 3,570 birr (80)	25- 8,000 birr (100)
	Sum for all HHs	12,560 birr (6)	25,690 birr (97)	113,245 birr (180)	51,375 birr (80)	61,870 birr (100)
<b>Total income from sale of production from project support</b>		15,310 birr (USD \$535) (7)	191,241 birr (USD \$6700) (229)	1,476,333 birr (USD \$41,794) (547)	713,773 birr (USD \$20,206) (261)	759,410 birr (USD \$21,498) (286)
Q404C. Proportion of households that earned income from own production, <b>NOT</b> project support		59.3 (229/386)	58.3 (208/357)	57.5 (377/656)	54.9 (175/319)	59.9 (202/337)
Income from Sale of animal products (in Birr)	% with income from sale of animal products	10.0 (23/229)	4.8 (10/208)	19.9 (75/377)	18.9 (33/175)	20.8 (42/202)
	Mean	805 birr (23)	546 birr (10)	1,767 birr (75)	1,302 birr (33)	2,132 birr (42)
	Median	400 birr (23)	270 birr (10)	500 birr (75)	525 birr (33)	475 birr (42)
	Range	20 – 3400 birr (23)	120 – 2,000 birr (10)	8-36,000 birr (75)	15-11,000 birr (33)	8-36,000 birr (42)
	Sum for all HHs	18,517 birr (23)	15,460 birr (10)	132,556 birr (75)	42,980 birr (33)	89,576 birr (42)
Income from sale of live animals	% with income from sale of live animal	23.1 (53/229)	13.5 (28/208)	15.9 (60/377)	16 .0 (28/175)	15.8 (32/202)
	Mean	2638 birr (53)	2588 birr (28)	4,234 birr (60)	3,037 birr (28)	5,281 birr (32)
	Median	1000 birr (53)	2125 birr (28)	2,550 birr (60)	1,800 birr (28)	3,750 birr (32)
	Range	8 – 11,000 birr (53)	100 – 8400 birr (28)	100-18,000 birr (60)	100-13,000 birr (28)	400-18,000 birr (32)
	Sum for all HHs	139,833 birr (53)	72,460 birr (28)	254,070 birr (60)	85,050 birr (28)	169,020 birr (32)
Income from sale Own vegetable products	% with income from sale of own vegetable products	79.0 (181/229)	33.2 (69)	43.0 (162/377)	41.1 (72/175)	44.6 (90/202)
	Mean	4,192 birr (181)	1,156 birr (69)	1,513 birr (162)	1,367 birr (72)	1,630 birr (90)
	Median	2550 birr	700 birr	500 birr	500 birr	500 birr

		(181)	(69)	(162)	(72)	(90)
	Range	50 – 25,000 birr (181)	24 – 1000 birr (69)	30-25,000 birr (162)	40-13,000 birr (72)	30-25,000 birr (90)
	Sum for all HHs	758,665 birr (181)	79,730 birr (69)	245,165 birr (162)	98,460 birr (72)	146,705 birr (90)
Q404C Income from Other Sales of other agricultural products (wood, herbs, spices, fishery, renting land)	% with income from sale of other agricultural products	5.2 (12/229)	13.5 (28/208)	68.2 (257/377)	66.9 (117/175)	69.3 (140/202)
	Mean	4809 birr (12)	1598 birr (28)	6018 birr (257)	5856 birr (117)	6154 birr (140)
	Median	2950 birr (12)	900 birr (28)	4000 birr (257)	3600 birr (117)	4200 birr (140)
	Range	300 – 15,100 birr (12)	80 – 7000 birr (28)	60-103,000 birr (257)	60-103,000 birr (117)	150-36,000 birr (140)
	Sum for all HHs	57,705 birr (12)	44,735 birr (28)	1,546,803 birr (257)	685,188 birr (117)	861,615 birr (140)
<b>Total income from sale of own production not project supported</b>		1,081,775 birr	900,105 birr	3,650,427 birr	2,025,976 birr	1,624,451 birr
Q405. Proportion with income from any other source other than agricultural activities in the last one year		60.1 (232/386)	81.5 (291/357)	79.8 (523/655)	82.7 (263/319)	77.2 (260/337)
If yes, amount earned in birr?	Mean	4546 birr (232)	3321 birr (291)	5387 birr (523)	5374 birr (263)	5401 birr (260)
	Median	2880 birr (232)	2400 birr (291)	4000 birr (523)	4200 birr (263)	4000 birr (260)
	Range	100 – 25,000 birr (232)	60 – 26,400 birr (291)	3-36,000 birr (523)	3-36000 birr (263)	240-30,000 birr (260)
	Sum for all HHs	1,054,720 birr (232)	966,333 birr (291)	2,817,731 birr (523)	1,413,471 birr (263)	1,404,260 birr (260)
<b>Total HH Income from all sources</b>		2,151,805 birr (\$77,858 USD) (341)	2,057,678 birr (\$105,507 USD) (349)	6,472,658 birr (523)	3,038,922 birr (263)	3,430,586 birr (260)
Average income per household for those reporting income		6,310 birr (\$223) (343)	5,896 birr (\$302) (349)	6,194 birr (590)	5,868 birr (277)	6,483 birr (313)
% of total HH income from project		0.1 (343)	6.3 (349)	22.8	23.5	22.1

<b>Q1001A_How many hours on average do you spend on work that generate income either in cash or in kind?</b>					
Mean	4.8 hrs (386)	5.8 hrs (357)	5.3 hrs (656)	5.3 hrs (319)	5.3 hrs (337)
Median	5.0 hrs (386)	6.0 hrs (357)	5 hrs (656)	5 hrs (319)	6 hrs (337)
Range	0 – 11 hrs (386)	0 – 12 hrs (357)	0-12 hrs (656)	0-12 rs (319)	0-12 hrs (337)
% of households with reporting “0” hours	10.6 (41/386)	7.8 (28/357)	9 (59/656)	8.8 (28/319)	9.2 (31/337)
<b>Q1001_How many months in a year do you spend on work that generate income either in cash or in kind?</b>	Not Asked				
Mean	---	6.2 months (357)	7 months (656)	7.1 months (319)	7 months (337)
Median	---	6.0 months (357)	7 months (656)	7 months (319)	6 months (337)
Range	---	0 – 11 months	0-12 months	0-12 months	0-12 months
% of households with reporting “0” months	---	7.8% (28/357)	4.4 % (29/656)	5.3 (17/319)	3.6 (12/337)

**Table 27. Household expenditure from income obtained from all sources in the past year**

<b>Q408 HH Expenditures</b>	<b>2017</b>	<b>2018</b>	<b>2020 All Cohort</b>	<b>2020 Cohort 1</b>	<b>2020 Cohort 2</b>
	<b>% (n)</b>	<b>% (n)</b>	<b>% (n)</b>	<b>% (n)</b>	<b>% (n)</b>
Q404B % of HHs with income from project sources	1.8 (7/386)	64.1 (229/357)	83.4 (547/656)	84.9 (286/337)	81.8 (261/319)
Q404C % of HHs with income from own ag production	59.3 (229/386)	58.3 (208/357)	91.1 (592/650)	92.9 (313/334)	87.5 (279/316)
Q405 % of HHs with income other than agriculture	60.1 (232/386)	81.5 (291/357)	79.7 (523/656)	77.2 (260/337)	82.4 (263/318)
% of HHs with income from one or more sources	88.3 (343/386)	97.8 (349/357)	90.4 (592/656)	92.8 (313/337)	87.5 (279/319)
<b>Repayment of debt</b>					
Project support	0.0 (0/343)	3.2 (11/349)	8.5 (55/645)	8.7 (29/332)	8.3 (26/313)
Other than project sources	25.7 (88/343)	15.2 (53/349)	29.6 (191/645)	29.2 (97/332)	30 (94/313)
<b>Savings</b>					
Project support	0.6 (2/343)	22.3 (51/349)	64.2 (414/645)	66.0 (219/332)	62.3 (195/313)
Other than project sources	35.8 (122/343)	67.6 (236/349)	73.0 (471/645)	72.6 (241/332)	73.5 (230/313)
<b>Education</b>					

Project support	0.0 (0/343)	6.0 (21/349)	26.7 (172/645)	24.4 (81/332)	29.1 (91/313)
Other than project sources	48.1 (165/343)	57.0 (199/349)	62.2 (401/645)	57.5 (191/332)	67.1 (210/313)
<b>Food purchase</b>					
Project support	1.7 (6/343)	52.7 (184/349)	54.6 (352/645)	50.6 (168/332)	58.8 (184/313)
Other than project sources	93.3 (320/343)	93.4 (326/349)	92.1 (594/645)	91 (302/332)	93.3 (292/313)
<b>Kerosene purchase for cooking and light</b>					
Project support	0.0 (0/343)	3.7 (13/349)	32.2 (208/645)	31.3 (104/332)	33.2 (104/313)
Other than project sources	32.9 (113/343)	50.1 (175/349)	74.7 (482/645)	71.1 (236/332)	78.6 (246/313)
<b>Health and health related expenses</b>					
Project support	0.3 (1/343)	8.9 (31/349)	22.9 (148/645)	19.9 (66/332)	26.2 (82/313)
Other than project sources	50.7 (174/343)	48.1 (168/349)	66.5 (429/645)	67.8 (225/332)	65.2 (204/313)
<b>Cleaning and sanitation supplies purchase</b>					
Project support	0.3 (1/343)	11.7 (41/349)	42.3 (273/645)	42.8 (142/332)	41.9 (131/313)
Other than project sources	70.6 (242/343)	65.0 (227/349)	86.5 (558/645)	83.7 (278/332)	89.5 (280/313)
<b>Clothing/ shoes</b>					
Project support	0.3 (1/343)	20.3 (71/349)	37.4 (241/645)	37 (123/332)	37.7 (118/313)
Other than project sources	77.6 (266/343)	69.1 (241/349)	89.9 (580/645)	90.1 (299/332)	89.8 (281/313)
<b>House improvement</b>					
Project support	0.0 (0/343)	0.9 (3/349)	6.2 (40/645)	6.6 (22/332)	5.8 (18/313)
Other than project sources	9.9 (34/343)	6.3 (22/349)	18.9 (122/645)	19.3 (64/332)	18.5 (58/313)
<b>Farm tools purchase</b>					
Project support	0.0 (0/343)	0.0 (0/349)	8.4 (54/645)	9.6 (32/332)	7 (22/313)
Other than project sources	8.2 (28/343)	1.7 (6/349)	19.4 (125/645)	21.7 (72/332)	16.9 (53/313)
<b>Vegetable seeds purchase</b>					
Project support	0.0 (0/343)	0.6 (2/349)	15 (97/645)	16 (53/332)	14.1 (44/313)
Other than project sources	14.3 (49/343)	0.9 (3/349)	29.8 (192/645)	32.2 (107/332)	27.2 (85/313)
<b>Agricultural inputs purchase (other than vegetable seeds – pesticide, fertilizer, etc)</b>					
Project support	0.3 (1/343)	3.2 (11/349)	18.6 (120/645)	17.8 (59/332)	19.5 (61/313)
Other than project sources	45.2 (155/343)	32.1 (112/349)	62.8 (405/645)	66.3 (220/332)	59.1 (185/313)
<b>Animal purchase</b>					
Project support	0.3	14.3	32.4	37	27.5

	(1/343)	(50/349)	(209/645)	(123/332)	(86/313)
Other than project sources	14.0 (48/343)	7.4 (26/349)	23.4 (151/645)	25.6 (85/332)	21.1 (66/313)
<b>Animal care/ feeding</b>					
Project support	0.3 (1/343)	2.3 (8/349)	15.7 (101/645)	17.2 (57/332)	14.1 (44/313)
Other than project sources	6.7 (23/343)	8.2 (28/349)	40.5 (261/645)	44.3 (147/332)	36.4 (114/313)

**Table 28. MVHHs received support from the project by type of support**

Services and Support Received		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
Q409. What services or support have you received from the project in the last one-year period?		% (n)	% (n)	% (n)	% (n)	% (n)
Livestock support						
Received support		94.8 (366/386)	91.9 (328/357)	99.7 (654/656)	99.4 (317/319)	100 (337/337)
Was support helpful and/or relevant?	Yes	99.5 (364/366)	87.5 (287/328)	92.4 (604/654)	90.5 (287/317)	97 (317/337)
	If no, main complaints:		Animals died Chickens have not started laying eggs	Animals died – sheep especially could not survive in the climate Animals were not productive		
Farm tools						
Received support		73.8 (285/386)	19.0 (68/357)	90.5 (594/656)	91.2 (291/319)	89.9 (303/337)
Was helpful/relevant		97.5 (278/285)	94.1 (66/68)	96.3 (572/594)	95.5 (278/291)	97 (294/303)
Seed/Seedling						
Received support		83.9 (324/386)	86.3 (308/357)	95.1 (624/656)	94.4 (301/319)	95.8 (323/337)
Was support helpful and/or relevant?	Yes	94.1 (305/324)	88.6 (273/308)	91.7 (572/624)	90.7 (273/301)	92.6 (299/323)
	If no, main complaints		Vegetables died due to disease; Not correct seed for land	Seeds were not productive Plants were not suitable to land or climate – vegetables died Lack of land for farming		
Participated in training						
Received support		73.8 (285/386)	30.0 (107/357)	93.9 (616/656)	92.8 (296/319)	95 320/337)
Was helpful/relevant		100.0 (285/285)	96.3 (103/107)	95.5 (588/616)	93.2 (276/296)	97.5 (312/320)
Technical support on agricultural activities						
Received support		30.6 (118/386)	13.4 (48/357)	67.2 (441/656)	66.8 (213/319)	67.7 (228/337)
Was helpful/relevant	Yes	100.0 (118/118)	100.0 (48/48)	90.7 (400/441)	87.3 (186/213)	93.9 (214/228)

	If no, main complaints	N/A	N/A	Technical support was not regular enough Did not receive appropriate advice or helpful support		
<b>Organized in Saving groups</b>						
Received support		63.7 (246/386)	78.2 (279/357)	93.9 (616/656)	94 (300/319)	93.8 (316/337)
Was helpful/relevant	Yes	99.6 (245/246)	92.5 (258/279)	89.8 (553/616)	88.7 (266/300)	90.8 (287/316)
	If no, main complaints	N/A	N/A	Savings group is no longer active or functional Did not see or experience benefits from participating		
<b>Participated in ECC Sessions</b>						
Received support		0.0 (0/386)	54.9 (196/357)	86.9 (570/656)	89.3 (285/319)	84.6 (285/337)
Was helpful/relevant		---	96.9 (190/196)	93.9 (535/570)	92.3 (263/285)	95.4 (272/285)
<b>Received nutrition counselling</b>						
Received support		67.4 (260/386)	29.2 (104/357)	79.1 (519/656)	77.7 (248/319)	80.4 (271/337)
Was helpful/relevant		99.6 (259)	95.3 (101/104)	98.1 (509/519)	98.8 (245/248)	97.4 (264/271)
<b>Access to basic drinking water</b>						
Received support		0.0 (0/386)	2.8 (10/357)	30.5 (200/656)	29.5 (94/319)	31.5 (106/337)
Was helpful/relevant		---	100.0 (10/10)	93.5 (187/200)	93.6 (88/94)	93.4 (99/106)
<b>Access to basic sanitation services</b>						
Received support		0.0 (0/386)	19.9 (71/357)	48.2 (316/656)	49.2 (157/319)	47.2 (159/337)
Was helpful/relevant		---	100.0 (71/71)	95.9 (303/316)	94.3 (148/157)	97.5 (155/159)
<b>Vaccination</b>						
Received support		0.0 (0/386)	1.4 (5/357)	70.9 (465/656)	69.3 (221/319)	72.4 (244/337)
Was helpful/relevant		---	100.0 (5/5)	99.4 (462/465)	99.5 (220/221)	99.2 (242/244)

**Table 29. Household Hunger Scale**

HH Hunger Scale	2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
	% (n)	% (n)	% (n)	% (n)	% (n)

Q501 – Proportion of HHs who, in the past one month, had no food to eat of any kind in their house because of lack of resources to get food.		49.2 (190/386)	60.5 (216/357)	17.4 (114/656)	20.4 (65/319)	14.5 (49/337)
Q502 How many times did this happen in the past month?	Rarely (once or twice in past 30 days)	34.7 (66/190)	34.3 (74/216)	46.2 (31/65)	47.4 (54/114)	49 (24/49)
	Sometimes (3-10 times in the past 30 days)	54.2 (103/190)	62.0 (134/216)	47.7 (31/65)	44.7 (51/114)	40.8 (20/49)
	Often (more than 10 times in the past 30 days)	11.1 (21/190)	3.7 (8/216)	6.2 (4/65)	7.9 (9/114)	10.2 (5/49)
Q503 – Proportion of HHs who reported, in the past one month, a HH member went to sleep at night hungry because there was not enough food?		26.9 (104/386)	34.5 (123/357)	11.9 (78/656)	13.8 (44/319)	10.1 (34/337)
Q504 How often did this happen in that past month?	Rarely (once or twice in past 30 days)	53.8 (56/104)	56.9 (70/123)	50 (22/44)	56.4 (44/78)	64.7 (22/34)
	Sometimes (3-10 times in the past 30 days)	41.3 (43/104)	41.5 (51/123)	43.2 (19/44)	38.5 (30/78)	32.4 (11/34)
	Often (more than 10 times in the past 30 days)	4.8 (5/104)	1.6 (2/123)	6.8 (3/44)	5.1 (4/78)	2.9 (1/34)
Q505 - Proportion of HHs who reported, in the past one month, that a HH member went a whole day and night without eating anything at all because there was not enough food		7.0 (27/386)	5.6 (20/357)	3.5 (23/656)	4.4 (14/319)	2.7 (9/337)
506 How many times did this happen in the past month?	Rarely (once or twice in past 30 days)	63.0 (17/27)	70.0 (14/20)	50 (7/14)	69.6 (16/23)	100 (9/9)
	Sometimes (3-10 times in the past 30 days)	33.3 (9/27)	30.0 (6/20)	50 (7/14)	30.4 (7/23)	0 (0/9)
	Often (more than 10 times in the past 30 days)	3.7 (1/27)	0.0 (0/20)	0 (0/14)	0 (0/23)	0 (0/9)

**Table 30. Iron folate consumption during most recent pregnancy**

Question	2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
	% (n)	% (n)	% (n)	% (n)	% (n)
Q704. % households with women 15 – 49 years old who were pregnant in the last 2 years	76.6 (295/385)	52.1 (184/353)	31.3 (201/643)	30.9 (95/307)	31.5 (106/336)
Mean	30.6 yrs	30.7 yrs	32.2 yrs	31.9 yrs	31.6 yrs

702. Women's Age (in completed year)		(295)	(184)	(307)	(643)	(336)
	Median	31.0 yrs (295)	30.0 yrs (184)	32 yrs (307)	32 yrs (643)	31 yrs (336)
	Range:	18 – 47 yrs (295)	18 – 46 yrs (184)	17 – 49 yrs (307)	17 – 49 yrs (643)	18 – 49 yrs (336)
Q705. % of households with women recently pregnant with respondents who are currently pregnant		8.8 (26/295)	12.5 (23/184)	24.9 (50/201)	20 (19/95)	29.2 (31/106)
Q706. % of women who were given or bought IFA tablets during last pregnancy in the last 2 years		70.8 (209/295)	69.6 (129/184)	78.1 (157/201)	74.7 (71/95)	81.1 (86/106)
707. During the whole last pregnancy (in the last 2 years) for how many days did you take the IFA tablets?	Mean	62.3 days (209)	69.0 days (129)	51.3 days (71)	49.7 days (157)	48.4 days (86)
	Median	60.0 days	60.0 days	60 days	40 days	35 days
	Range	2 – 183 days (209)	2 – 180 days (129)	1-150 days	1-180 days	1-180 days
% of women who received IFA supplementation for at least 3 months during last pregnancy		32.5 (68/209)	40.6 (52/128)	26.8 (42/157)	28.2 (20/71)	25.6 (22/86)

**Table 31. Food groups consumed by women among MVHHS**

Maternal Dietary Diversity		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
% of HH meeting minimum diet diversity for mothers	Inadequate: $\leq 4$ food groups	97.6 (377/386)	91.5 (324/354)	82.1 (528/643)	84 (258/319)	80.4 (270/337)
	Adequate $\geq 5$ food groups	2.4 (9/386)	8.5 (30/354)	17.9 (115/643)	19.6 (49/319)	19.6 (66/337)
% of women who reported consuming each food group:						
708. Bread, biscuits, porridge, Enjera, noodles (Indomin), rice, or other foods made from grains such as Teff, corn, millet (dagusa), sorghum, wheat, oats, barley?		85.7 (330/385)	88.7 (313/353)	95.5 (614/643)	96.1 (295/307)	94.9 (319/336)
709. Pumpkin, carrots, squash, sweet potatoes or any other dark yellow or orange fleshed roots, tubers and vegetables?	Yes	13.0 (50/385)	14.4 (51/353)	24.0 (154/643)	24.4 (75/307)	23.5 (79/336)
710. White potatoes, potato chips, white yams, cassava, bulla, kocho, manioc, or any other foods made from roots?	Yes	41.6 (160/385)	44.8 (158/353)	39.0 (251/643)	38.8 (119/307)	39.3 (132/336)
711. Any dark green leafy vegetables such as spinach, pumpkin leaves, kale, mustard leaves or moringa?	Yes	35.6 (137/385)	22.9 (81/353)	30.2 (194/643)	30.3 (93/307)	30.1 (101/336)



712. Any other vegetables like green beans, tomatoes, cauliflower, cabbage, broccoli, eggplant, etc?	Yes	28.6 (110/385)	40.5 (143/353)	43.9 (282/643)	38.8 (119/307)	48.5 (163/336)
713. Ripe mangos, ripe papaya or other fruits that are dark yellow or orange inside?	Yes	0.5 (2/385)	0.0 (0/353)	5.8 (37/643)	5.2 (16/307)	6.3 (21/336)
714. Any other fruits like bananas, apples, avocados, guava, pineapple, plum, orange, any berries, etc.?	Yes	3.4 (13/385)	3.4 (12/353)	10.3 (65/643)	6.8 (21/307)	13.4 (45/336)
715. Any liver, kidney, heart, or other organ meats from domesticated animals such as beef, pork, lamb, goat, chicken, or duck?	Yes	0.3 (1/385)	0.0 (0/353)	2.2 (14/643)	2.6 (8/307)	1.8 (6/336)
716. Any meat from domesticated animals, such as beef, pork, lamb, goat, chicken, or duck?	Yes	2.9 (11/385)	3.7 (13/353)	15.2 (98/643)	14.0 (43/307)	16.4 (55/336)
717. Any organs from wild animals, such as birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	Yes	0.3 (1/385)	0.3 (1/353)	0.5 (3/643)	0.7 (2/307)	0.3 (1/336)
718. Any flesh from wild animals, such as birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	Yes	0.0 (0/385)	0.0 (0/353)	0.2 (1/643)	0 (0/307)	0.3 (1/313)
719. Eggs?	Yes	0.5 (2/385)	8.2 (29/353)	19.3 (124/643)	18.9 (58/307)	19.6 (66/336)
720. Fresh or dried fish, shellfish?	Yes	0.8 (3/385)	0.6 (2/353)	0.8 (5/643)	1.0 (3/307)	0.6 (2/336)
721. Any foods made from beans, peas, lentils, peanuts or other legumes?	Yes	56.1 (216/385)	59.8 (211/353)	76.0 (489/643)	75.2 (231/307)	76.8 (258/336)
722. Any foods made from nuts and seeds such as pumpkin seeds?	Yes	0.3 (1/385)	0.0 (0/353)	2.8 (18/643)	3.6 (11/307)	2.1 (7/336)
723. Milk, cheese, yogurt, skim milk (arera), whey (aguat), cottage-cheese, or other milk products?	Yes	8.8 (34/385)	5.4 (19/353)	15.4 (99/643)	13.7 (42/307)	17 (57/336)
724. Any oils, fats, butter, ghee, or foods made with any of these?	Yes	76.6 (295/385)	81.3 (287/353)	91.4 (588/643)	89.6 (275/307)	93.2 (313/336)
725. Any sugary foods such as chocolates, sweets (halawa, mushebek), candies, doughnuts, cakes, honey?	Yes	13.2 (51/385)	12.7 (45/353)	27.4 (176/643)	25.7 (79/307)	28.9 (97/336)
726. Condiments for flavor, such as chilies, spices, herbs, or fennel grain, coriander, cumin, ginger,	Yes	62.3 (240/385)	62.6 (221/353)	75.6 (486/643)	74.6 (229/307)	76.5 (257/336)

turmeric, garlic, cardamom?						
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**Table 32. Infant and Young Child Feeding Practices**

IYCF Practices		2017	2018	2020 All Cohort
		% (n)	% (n)	% (n)
% of households with children 0-24 months of age		69.4 (268/386)	48.5 (173/357)	23.9 (157/658)
% HHs with <b>infant 0-5 months</b>		17.4 (67/386)	6.4 (23/357)	8.1 (53/658)
% of infants 0-5 months ever breastfed		100.0 (67/67)	100.0 (16/16)	100.0 (55/55)
805. How long after birth did you first put the child to the breast?	Immediately/Less than an hour	73.1 (49/67)	62.5 (10/16)	61.8 (34/55)
	Within 24 hours	19.4 (13/67)	37.5 (6/16)	32.7 (18/55)
	After a day/24+ hrs	7.5 (5/67)	0.0 (0/8)	0.0 (0/55)
806. In the first three days after delivery, was the child given anything to drink other than breastmilk?	Yes	0.0 (0/67)	4.3 (1/23)	5.7 (3/53)
807. What was the child given to drink?	Milk	0.0 (0/1)	---	---
	Plain Water	0.0 (0/1)	---	33.3 (1/3)
	Sugar/Glucose	0.0 (0/1)	---	---
	Water	0.0 (0/1)	---	---
	Gripe Water	0.0 (0/1)	---	---
	Sugar-Salt-Water Solution	0.0 (0/1)	---	---
	Fruit Juice	0.0 (0/1)	---	---
	Tea/Infusions	0.0 (0/1)	---	---
	Honey	0.0 (0/1)	---	---
	Fresh Butter	0.0 (0/1)	100.0 (1/23)	66.7 (2/3)
	Fenugreek	0.0 (0/1)	---	---
	Other	0.0 (0/1)	---	---
808. Was the child breastfed yesterday during the day or at night?	Yes	100 (67/67)	87.5 (7/8)	100 (53/53)
810. Was the child given any vitamin drops or other medicines as drops yesterday during the day or at night?	Yes	6.0 (4/67)	0.0 (0/8)	3.8 (2/53)

811. Did the child consume any semisolid foods or liquids like water, formula milk, porridge, cow/goat milk, juice, etc, yesterday during the day or at night?	Yes	7.5 (5/67)	12.5 (1/8)	1.9 (1/53)
<i>Continued Breastfeeding, Dietary Diversity, and Meal Frequency (for children 6-23 months)</i>				
% of HHs with children 6 – 23 months		52.1 (201/386)	41.5 (148/357)	15.8 (104/658)
812. Are you still breastfeeding the child?	Yes	94.5 (190/201)	90.3% (112/124)	93.1 (94/101)
813. Bread, biscuits, porridge, Enjera, noodles (Indomin), rice or other foods made from grains such as Teff, corn, millet, sorghum, wheat, oats, barley?	Yes	81.6 (164/201)	83.8 (124/148)	89.1 (90/101)
814. Pumpkin, carrots, squash, sweet potatoes or or any other dark yellow or orange fleshed roots, tubers and vegetables?	Yes	7.0 (14/201)	15.5 (23/148)	17.8 (18/101)
815. White potatoes, potato chips, white yams, cassava, bulla, kocho, manioc, or any other foods made from roots?	Yes	33.3 (67/201)	37.2 (55/148)	34.7 (35/101)
816. Any dark green leafy veg (spinach, lettuce with dark green leaves, moringa leaves, sama)	Yes	14.9 (30/201)	0.0 (0/148)	10.9 (11/101)
817. Orange/yellow colored fruit like ripe mangoes, ripe papaya (NO ORANGES)	Yes	1.0 (2/201)	1.4 (2/148)	4.0 (4/101)
818. Any dark green leafy vegetables such as spinach, pumpkin leaves, kale, mustard leaves, moringa?	Yes	5.0 (10/201)	8.8 (13/148)	12.9 (13/101)
819. Any other vegetables, like green beans, tomatoes, cauliflower, cabbage, broccoli, eggplant, etc.?	Yes	23.9 (48/201)	27.0 (40/148)	29.7 (30/101)
820. Ripe mangoes, ripe papaya, or other fruits that are dark yellow or orange inside?	Yes	1.5 (3/201)	0.0 (0/148)	5.0 (5/101)
821. Any other fruits like bananas, apples, avocados, guava, pineapple, plum, orange, any berries, etc.?	Yes	3.0 (6/201)	4.7 (7/148)	9.9 (10/101)
822. Any liver, kidney, heart, or other organ meats from domesticated animals such as beef, pork, lamb, goat, chicken, or duck?	Yes	0.0 (0/201)	0.0 (0/148)	0.0 (0/101)
823. Any meat from domesticated animals, such as beef, pork, lamb, goat, chicken, or duck?	Yes	2.0 (4/201)	2.0 (3/148)	6.9 (7/101)
824. Any organs from wild animals, such as birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	Yes	0.0 (0/201)	0.0 (0/148)	0.0 (0/101)
825. Any flesh from wild animals, such as birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	Yes	0.0 (0/201)	0.0 (0/148)	0.0 (0/101)
826. Eggs?	Yes	13.9 (28/201)	33.8 (50/148)	41.6 (42/101)
827. Fresh or dried fish, shellfish?	Yes	0.5 (1/201)	0.7 (1/148)	0.0 (0/101)

828. Any foods made from beans, peas, lentils, peanuts or other legumes?	Yes	46.8 (94/201)	49.3 (73/148)	57.4 (58/101)
829. Any foods made from nuts and seeds such as pumpkin seeds?	Yes	1.0 (2/201)	0.0 (0/148)	2.0 (2/101)
830. Cheese, yogurt, skim milk (alera), whey (aguat), cottage-cheese, or other milk products?	Yes	18.4 (37/201)	8.8 (13/148)	28.7 (29/101)
831. Any oils, fats, butter, ghee, or foods made with any of these?	Yes	64.7 (130/201)	73.0 (108/148)	77.2 (78/101)
832. Any sugary foods such as chocolates, sweets (halawa, mushebek), candies, doughnuts, cakes, honey?	Yes	18.9 (38/201)	12.2 (18/148)	76.2 (77/101)
833. Condiments for flavor, such as chilies, spices, herbs, or fennel grain, coriander, cumin, ginger, turmeric, garlic, cardamom?	Yes	37.8 (76/201)	46.6 (69/148)	42.6 (43/101)

**Table 33. Household participation in economic strengthening activities, income generation, and utilization**

Women's Workload/ Decision making		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
1001. How many hours on average do you spend on work that generate income either in cash or in kind?	Mean	4.8 hrs (386)	5.8 hrs (354)	5.2 hrs (656)	5.3 hrs (319)	5.3 hrs (337)
	Range	0-11 hrs	0 – 12 hrs	0 – 12 hrs	0 – 12 hrs	0 – 12 hrs
Q1001_How many months in a year do you spend on work that generate income either in cash or in kind?	Mean	Not asked	6.2 months (354)	7.0 months (656)	7.1 months (319)	6.9 months (337)
	Range		0 – 11 mos	0 – 12 mos	0 – 12 mos	0 – 12 mos
1002. The average time spent (in hours) on household related work especially on food preparation, serving and child/self-care	<2 hrs	13.5 (52/386)	3.4 (12/354)	11.6 (76/656)	9.4 (30/319)	13.9 (47/337)
	2-4 hrs	45.1 (174/386)	48.3 (171/354)	44.8 (294/656)	45.1 (144/319)	44.5 (150/337)
	5-6 hrs	28.2 (109/386)	36.7 (130/354)	28.8 (189/656)	32.9 (105/319)	24.9 (85/337)
	7-8 hrs	11.1 (43/386)	9.9 (35/354)	9.9 (65/656)	8.5 (27/319)	11.3 (38/337)
	9-10 hrs	1.8 (7/386)	0.8 (3/354)	1.1 (7/656)	0.9 (3/319)	1.2 (4/337)
	>10 hrs	0.3 (1/386)	0.9 (3/354)	3.6 (24/656)	3.2 (10/319)	4.2 (14/337)
1003. What is the average time spent	<2 hrs	14.2 (55/386)	18.6 (66/354)	18.4 (121/656)	21.0 (67/319)	16.0 (54/337)

daily (in hours) on non-food and non-child care related household chores such as water fetching, firewood collection, cleaning, procurement of food items, marketing and others?	2-4 hrs	49.2 (190/386)	43.5 (154/354)	39.2 (257/656)	37.3 (119/319)	40.9 (138/337)
	5-6 hrs	33.2 (128/386)	30.5 (108/354)	32.3 (211/656)	30.7 (98/319)	33.5 (113/337)
	7-8 hrs	3.4 (13/386)	7.3 (26/354)	7.2 (47/656)	9.0 (30/319)	5.0 (17/337)
	9-10 hrs	0.0 (0/386)	0.0 (0/354)	2.3 (15/656)	1.3 (4/319)	3.3 (11/337)
	>10 hrs	0.0 (0/386)	0.0 (0/354)	0.8 (5/656)	0.3 (1/319)	1.2 (4/337)
<b>Women's access to and control over resources (decision-making)</b>						
1004. Most of the time who decides on household income expenditure?	Self	27.5 (106/386)	26.6 (95/354)	19.8 (130/656)	21.0 (67/319)	18.7 (63/337)
	Jointly with Husband	55.2 (213/386)	61.9 (219/354)	69.1 (453/656)	69.6 (222/319)	68.5 (231/337)
	Jointly with other family members	2.3 (9/386)	2.8 (10/354)	2.7 (18/656)	3.1 (10/319)	2.4 (8/337)
	Head of Household	2.8 (11/386)	5.1 (18/354)	2.6 (17/656)	1.9 (6/319)	3.3 (11/337)
	Husband	12.2 (47/386)	3.7 (13/354)	5.6 (37/656)	4.4 (14/319)	6.8 (23/337)
1005. Most of the time who makes decisions on what type of food to purchase?	Self	62.2 (240/386)	61.9 (219/354)	36.9 (242/656)	39.8 (127/319)	34.1 (115/337)
	Jointly with Husband	32.4 (125/386)	33.9 (120/354)	55.6 (365/656)	52.4 (167/319)	58.8 (198/337)
	Jointly with other family members	2.1 (8/386)	2.3 (8/354)	3.0 (20/656)	3.1 (10/319)	3.0 (10/337)
	Head of Household	1.0 (4/386)	1.4 (5/354)	1.8 (12/656)	1.6 (5/319)	2.1 (7/337)
	Husband	2.3 (9/386)	0.6 (2/354)	2.3 (15/656)	3.1 (10/319)	1.5 (5/337)
1006. Most of the time who makes decisions on the type of food consumed?	Self	75.4 (291/386)	51.7 (183/354)	60.8 (399/656)	60.5 (193/319)	61.1 (206/337)
	Jointly with Husband	21.2 (82/386)	43.2 (153/354)	34.5 (226/656)	35.4 (113/319)	33.5 (113/337)
	Jointly with other family members	1.6 (6/386)	2.3 (8/354)	2.9 (19/656)	2.5 (8/319)	3.3 (11/337)
	Head of Household	1.0 (4/386)	1.1 (4/354)	0.6 (4/656)	0.3 (1/319)	0.9 (3/337)
	Husband	0.8 (3/386)	1.7 (6/354)	0.9 (6/656)	1.3 (4/319)	0.6 (2/337)
1007. Who gets to decide on husband's	Self	1.9 (42/386)	2.8 (10/354)	8.7 (57/656)	9.1 (29/319)	8.3 (28/337)

income most of the time?	Jointly with Husband	52.1 (201/386)	55.1 (195/354)	58.4 (383/656)	59.9 (191/319)	57.0 (192/337)
	Jointly with other family members	1.3 (5/386)	0.8 (3/354)	0.8 (5/656)	0.9 (3/319)	0.6 (2/337)
	Head of Household	1.8 (7/386)	6.5 (23/354)	0.6 (4/656)	0.3 (1/319)	0.9 (3/337)
	Husband	25.4 (98/386)	19.2 (68/354)	21.6 (142/656)	19.7 (63/319)	23.4 (79/337)
	I have no husband	8.5 (33/386)	15.5 (55/354)	9.8 (64/656)	9.7 (31/319)	9.8 (33/337)
1008. Who gets to decide on wife's income most of the time?	Self	40.9 (158/386)	38.4 (136/354)	38.0 (249/656)	37.3 (119/319)	38.6 (130/337)
	Jointly with Husband	51.6 (199/386)	53.7 (190/354)	56.9 (373/656)	58.3 (186/319)	55.5 (187/337)
	Jointly with other family members	1.8 (7/386)	2.0 (7/354)	1.7 (11/656)	1.6 (5/319)	1.8 (6/337)
	Head of Household	1.0 (4/386)	0.6 (2/354)	0.3 (2/656)	0.0 (0/319)	0.6 (2/337)
	Husband	4.4 (17/386)	1.4 (5/354)	0.6 (4/656)	0.9 (3/319)	0.3 (1/337)
	Others	0.3 (1/386)	4.0 (14/354)	2.6 (17/656)	1.9 (6/319)	3.3 (11/337)
Man's work within a day						
% of MVHH with male respondents available		57.8 (223/386)	60.5 (215/357)	55.6 (365/656)	55.8 (178/319)	55.5 (187/337)
1009. How many hours on average do you spend on work that generate income either in cash or in kind?	Mean	7.6 hrs (223)	7.8 hrs (215)	7.3 hrs (365)	7.2 hrs (178)	7.3 hrs (187)
	Range	0-12 hrs	0 – 12 hrs	0 – 12 hrs	0 – 12 hrs	0 – 12 hrs
1010. The average time spent (in hours) on household related work especially on food preparation, serving and child/self-care)?	0 hrs	38.6 (86/223)	42.3 (91/215)	37.5 (137/365)	36.5 (65/178)	38.5 (72/187)
	<2 hrs	51.6 (115/223)	41.4 (89/215)	49.9 (182/365)	48.9 (87/178)	50.8 (95/187)
	2-4 hrs	9.4 (21/223)	15.3 (33/215)	8.5 (31/365)	9.0 (16/178)	8.0 (15/187)
	5-6 hrs	0.4 (1/223)	1.0 (2/215)	2.2 (8/365)	2.8 (5/178)	1.6 (3/187)
1011. What is the average time spent daily (in hours) on non-food and non-child care related household chores such as water fetching, firewood collection, cleaning, procurement of food	0 hrs	16.6 (37/223)	30.7 (66/215)	23.3 (85/565)	25.8 (46/178)	20.9 (39/187)
	<2 hrs	46.6 (104/223)	42.8 (92/215)	49 (179/365)	47.8 (85/178)	50.3 (94/187)
	2-4 hrs	33.6 (75/223)	21.9 (47/215)	22.5 (82/365)	20.8 (37/178)	24.1 (45/187)
	5-6 hrs	2.7 (6/223)	4.7 (10/215)	2.2 (8/365)	1.1 (2/178)	3.2 (6/187)
	7-8 hrs	0.4 (1/223)	0.0 (0/215)	0.0 (0/365)	2.2 (4/178)	0.0 (0/187)

items, marketing and others?						
1012. Most of the time who decides on household income expenditure?	Self	23.7 (53/223)	8.4 (18/215)	12.3 (45/365)	12.4 (22/178)	12.3 (23/187)
	Jointly with wife	69.1 (154/223)	81.9 (176/215)	84.9 (310/365)	86.5 (154/178)	83.4 (156/187)
	Jointly with other family members	1.3 (3/223)	1.4 (3/215)	1.1 (4/365)	0.0 (0/187)	2.1 (4/187)
	Head of Household	0.9 (2/223)	1.9 (4/215)	0.5 (2/365)	0.0 (0/187)	1.1 (2/187)
	Wife	4.9 (11/223)	6.0 (13/215)	0.8 (3/365)	0.6 (1/187)	1.1 (2/187)
	D/K	0.0 (0/223)	0.5 (1/215)	0.3 (1/365)	0.6 (1/187)	0.0 (0/187)
1013. Most of the time who makes decisions on what type of food to purchase?	Self	8.5 (19/223)	1.9 (4/215)	7.4 (27/365)	9.0 (16/178)	5.9 (11/187)
	Jointly with wife	43.5 (97/223)	50.7 (109/215)	72.1 (263/365)	71.3 (127/178)	72.0 (136/187)
	Jointly with other family members	0.4 (1/223)	0.9 (2/215)	1.4 (5/365)	0.6 (1/178)	2.1 (4/187)
	Head of Household	0.4 (1/223)	1.9 (4/215)	0.3 (1/365)	0.6 (1/178)	0.0 (0/187)
	Wife	47.1 (105/223)	44.2 (95/215)	18.9 (69/365)	18.5 (33/178)	19.3 (36/187)
	D/K	0.0 (0/223)	0.5 (1/215)	0.0 (0/365)	0.0 (0/178)	0.0 (0/187)
1014. Most of the time who makes decisions on the type of food consumed?	Self	9.0 (20/223)	0.5 (1/215)	6.0 (22/365)	7.3 (13/178)	4.8 (9/178)
	Jointly with wife	25.1 (56/223)	40.0 (86/215)	42.5 (155/365)	42.1 (75/178)	42.8 (80/187)
	Jointly with other family members	0.4 (1/223)	1.4 (3/215)	0.8 (3/365)	0.0 (0/178)	1.6 (3/187)
	Head of Household	0.0 (0/223)	0.9 (2/215)	0.3 (1/365)	0.6 (1/178)	0.0 (0/187)
	Wife	65.5 (146/223)	56.7 (122/215)	50.4 (184/365)	50.0 (89/178)	50.8 (95/187)
	D/K	0.0 (0/223)	0.5 (1/215)	0.0 (0/365)	0.0 (0/178)	0.0 (0/187)
1015. Who gets to decide on husband's income most of the time?	Self	28.3 (63/223)	18.6 (40/215)	24.0 (91/365)	25.3 (45/178)	24.6 (46/187)
	Jointly with wife	67.3 (150/223)	76.3 (164/215)	72.1 (263/365)	73.0 (130/178)	71.1 (133/187)
	Jointly with other family members	1.3 (3/223)	0.5 (1/215)	0.8 (3/365)	0.6 (1/178)	1.1 (2/187)
	Head of Household	0.4 (1/223)	0.9 (2/215)	0.8 (3/365)	0.0 (0/178)	1.6 (3/187)

	Wife	2.7 (6/223)	1.4 (3/215)	0.8 (3/365)	0.0 (0/178)	1.6 (3/187)
	D/K	0.0 (0/223)	2.3 (5/215)	0.8 (3/365)	0.6 (1/178)	1.1 (2/187)
1016. Who gets to decide on wife's income most of the time?	Self	6.7 (15/223)	1.4 (3/215)	0.5 (2/365)	0.6 (1/178)	0.5 (1/187)
	Jointly with wife	69.2 (155/223)	72.1 (155/215)	69.6 (254/365)	69.7 (12/178)	69.5 (130/187)
	Jointly with other family members	0.4 (1/223)	0.5 (1/215)	0.5 (2/365)	0.0 (0/178)	1.1 (2/187)
	Head of household	0.4 (1/223)	0.5 (1/215)	0.5 (2/365)	0.0 (0/178)	1.1 (2/187)
	Wife	22.8 (51/223)	20.9 (45/215)	25.2 (92/365)	25.8 (46/178)	24.6 (46/187)
	No response	0.4 (1/223)	4.7 (10/215)	2.2 (8/365)	2.2 (4/178)	2.1 (4/187)

**Table 34. Water, Sanitation, and Hygiene Practices**

Water, Sanitation, Health (WASH)		2017	2018	2020 All Cohort	2020 Cohort 1	2020 Cohort 2
		% (n)	% (n)	% (n)	% (n)	% (n)
901. Yesterday, did you wash your hands?		99.5 (384/386)	100 (357/357)	99.8 (655/656)	100.0 (319/319)	99.7 (336/337)
902. What are all the moments that you washed your hands?	When dirt is visible	49.5 (190/384)	56.3 (201/357)	59.4 (389/655)	58.6 (187/319)	60.1 (202/336)
	After toilet use/defecation/urination	62.2 (239/384)	70.6 (252/357)	70.2 (460/655)	73.0 (233/319)	67.6 (227/336)
	After cleaning child following defecation	39.8 (153/384)	30.0 (107/357)	42.7 (280/655)	42.9 (137/319)	42.6 (143/336)
	Before preparing the food	87.2 (335/384)	84.0 (300/357)	88.7 (581/655)	89.3 (285/319)	88.1 (296/336)
	Before serving a meal	55.2 (212/384)	53.5 (191/357)	49.4 (494/655)	44.4 (244/319)	45.0 (250/336)
	Before eating	87.2 (335/384)	87.7 (313/357)	91.3 (598/655)	91.2 (291/319)	91.4 (307/336)
	After eating	71.6 (275/384)	61.1 (218/357)	78.5 (514/655)	78.7 (251/319)	78.3 (263/336)
	Before feeding a child	37.2 (143/384)	44.3 (158/357)	40.6 (266/655)	39.8 (127/319)	41.4 (139/336)
	When I am reminded to do so	1.3 (5/384)	3.9 (14/357)	11.9 (78/655)	10.7 (34/319)	13.1 (44/336)
903. What do you use to wash your hands most of the time?	Water Only	44.9 (172/384)	38.9 (139/357)	40.3 (264/655)	44.2 (141/319)	36.6 (123/336)
	Water and Soap	52.7 (202/384)	53.5 (191/357)	51.6 (338/655)	46.1 (147/319)	56.8 (191/336)
	Water and Ash/Endod	2.3 (9/384)	7.6 (27/357)	8.1 (53/655)	9.7 (31/319)	6.5 (22/336)
904. Does the HH have a handwashing facility at home?		2.1 (8/386)	14.3 (51/357)	28.0 (184/656)	30.7 (98/319)	25.5 (86/337)



905. If yes, what type is it?	Tippy Tap	12.5 (1/8)	29.4 (15/51)	30.4 (56/184)	31.6 (31/98)	29.1 (25/86)
	Water basin with jug	87.5 (7/8)	68.6 (35/51)	76.1 (140/184)	79.6 (78/98)	72.1 (62/86)
	An improved handwashing facility with tap	0.0 (0/8)	0.0 (0/51)	0.0 (0/184)	0.0 (0/98)	0.0 (0/86)
	Others	0.0 (0/8)	0.0 (0/51)	0.0 (0/184)	0.0 (0/98)	0.0 (0/86)
	Not observed	0.0 (0/8)	2.0 (1/51)	2.2 (4/184)	2.3 (2/98)	2.0 (2/86)
906. If yes, where is it located?	In the house corner/food cooking place	25.0 (2/8)	60.8 (31/51)	10.0 (4/40)	16.7 (3/18)	4.5 (1/22)
	Near the latrine	25.0 (2/8)	23.5 (12/51)	90.0 (36/40)	83.3 (15/18)	95.5 (21/22)
	In the house other than food cooking place	37.5 (3/8)	5.9 (3/51)	0.0 (0/184)	0.0 (0/98)	0.0 (0/86)
	Outside of the house	12.5 (1/8)	9.8 (5/51)	0.0 (0/184)	0.0 (0/98)	0.0 (0/86)
OBSERVATION ONLY: If HH has handwashing facility at home observe presence of water at the place for handwashing						
Water is available	Yes	Not asked	42.0 (21/51)	34.8 (64/184)	33.7 (33/98)	36.1 (31/86)
Q911_OBSERVATION ONLY: Observe presence of soap, detergent, or other cleansing agent at the place for handwashing_	Soap or detergent (bar, liquid, powder, paste)	Not asked	40.0 (20/51)	26.6 (49/184)	25.5 (25/98)	27.9 (24/86)
	Ash, mud, sand	Not asked	12.0 (6/21)	4.4 (8/184)	7.1 (7/98)	1.2 (1/86)
	None	Not asked	48.0 (25/51)	54.4 (100/184)	47.0 (46/98)	62.8 (54/86)
% of HH that practice point of use water treatment?		7.5 (29/386)	2.5 (9/357)	6.7 (44/656)	6.9 (22/319)	6.5 (22/337)
908. What type of water treatment does the HH use? (check all that apply)	Boiling	44.8 (13/29)	0.0 (0/9)	25.0 (11/44)	18.2 (4/22)	31.8 (7/22)
	Water treatment chemicals	48.3 (14/29)	77.8 (7/9)	72.7 (32/44)	72.7 (16/22)	72.7 (16/22)
	Household water filter (sawyer or tulip)	20.7 (6/29)	33.3 (3/9)	4.5 (2/44)	9.1 (2/22)	0.0 (0/22)