



# RAPID ASSESSMENT OF THE IMPACT OF COVID-19 ON FOOD SYSTEMS AND RURAL LIVELIHOODS IN SUB-SAHARAN AFRICA

**Marco Carreras, Amrita Saha and John Thompson**

APRA COVID-19 Synthesis Report 2  
December 2020

## **Acknowledgements**

We would like to acknowledge the efforts of the APRA teams who contributed to the design of this study in seven countries and collected the data used in this report. They have all produced their own APRA COVID-19 Country Reports which are available at: [https://www.future-agricultures.org/covid-19/#apra\\_publications](https://www.future-agricultures.org/covid-19/#apra_publications). Citations for these reports are provided below.

A further round of COVID-19 research and reports is planned for early 2021. This will also be made available on the APRA website.

We would also like to acknowledge the support of Rachel Sabates-Wheeler in reviewing the research design.

### **Ethiopia**

Assaye, A. and Alemu, D. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods: The Case of the Fogera Plain, Ethiopia. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Ghana**

Hodey, L. and Dzanku, F. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods in Ghana. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Kenya**

Olwande, J. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods in Kenya. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Malawi**

Matita, M. and Chimombo, M. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods in Malawi. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Nigeria**

Adebayo, A.B. and Muyanga, M. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods in Nigeria. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Tanzania**

Boniface, G. and Magomba, C.G. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods in Tanzania. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Zambia**

Matenga, C. and Hichaambwa, M. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods: Zambia. Round 1 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

### **Zimbabwe**

Mutyasira, V. (2020) *Impact of COVID-19 on Food Systems and Rural Livelihoods in Zimbabwe. Round 2 – December 2020*, APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium

## Key findings

- The COVID-19 crisis continues to have differential, but disruptive impacts on food systems and rural livelihoods in the 846 sample households surveyed by APRA for the second round of this multi-round assessment in Ethiopia, Ghana, Kenya, Malawi, Nigeria, Tanzania, Zambia and Zimbabwe. This has coincided with other environmental and social crises – e.g. flooding, locust infestations, conflict, etc. – in several countries, exacerbating the observed effects.
- Round 2 findings suggest that the shock of COVID-19 has resulted not so much in a ‘food production crisis’ as an ‘income-nutrition-livelihood crisis’ in some communities and households in the eight countries.
- But these effects have not all been negative. Some households have innovated to survive, shifting towards more local production, shorter value chains and diversifying the range of their off-farm livelihood activities.
- Many households continued to report more burdens of childcare and housework responsibilities in the study areas in Zambia, Kenya and Ghana; women and girls face the greatest burden of housework.
- Individuals were still reducing their movements both within and outside their own village, except for Tanzania where travel restrictions and lockdown measures have been limited.
- Compared to June-July, fewer (though still a large proportion) respondents reported a decrease in the number of buyers or traders coming to the village to do business, apart from those in Ethiopia where marketing activities were largely unaffected.
- There is a general decrease in households receiving any type of emergency assistance, with many stating they have yet to receive any support, especially those in Ghana, Kenya, Malawi, Nigeria and Tanzania. Family and friends and local religious organisations remain important sources of support for some households, particularly in Ethiopia, Malawi and Zambia.
- Most respondents in Ethiopia, Ghana, Kenya, Malawi and Tanzania reported no major changes in their own participation in farming activities since the first round but did experience a decrease in participation in business or household enterprises (except in Ethiopia).
- Farmers’ participation in both farm and off-farm economic activities has generally improved in Ghana. While in Nigeria, Zambia and Zimbabwe, most respondents continued to report a decrease in their participation in farming activities as well as in their business activities.
- The majority of the respondents in Ethiopia, Nigeria, Tanzania, Zambia and Zimbabwe reported that they have been able to hire farm workers. However, access to hired labour continues to be disrupted in Ghana, Kenya and Malawi and labour costs have been increasing in several countries.
- Most respondents in Ethiopia and Zambia reported a reduced availability of several food items, but there were fewer changes in the general availability of foods in the other countries. White roots, tubers, plantains; vegetables and fruits are the most common food groups where availability had declined, but, overall, for several food items, respondents reported improved availability in local markets. In Zambia, food availability issues appear quite stark as nearly half of all respondents reported a decrease in availability of several food groups.
- Food prices have increased across several major food groups, with the prices of grains, pulses, and nuts and seeds most affected.
- Responses by a sizeable number of sample households in Kenya (40%), Malawi (34%) and Nigeria (16%) indicate that they “went without eating for a whole day because of a lack of money or other resources”.
- Many households are starting to perceive more control over their own lives as farming and economic activities have improved and, in some cases, diversified.

## 1. Introduction

The shock of COVID-19 has continued to reverberate through food systems across Sub-Saharan Africa following its arrival in the region in early 2020. The socio-economic impact of the pandemic caused by the imposition of strict control measures on social and commercial activities is proving to be more disastrous than the actual virus in many countries (GHI, 2020; WFP, 2020). While global agricultural markets are predicted to remain stable into 2021 (Schmidhuber, 2020), food security impacts are being felt unevenly at the local level (Reardon, *et al.* 2020; Carreras, *et al.*, 2020). Furthermore, the pandemic has coincided with a number of other stresses (extreme weather events, locust infestations, conflict and insecurity, or a combination of these) in several countries, exacerbating some of the observed effects resulting from efforts to control the spread of the virus (FAO-WFP, 2020).

This report presents a summary of findings emerging from the second round of a three-wave rapid assessment led by the Agricultural Policy Research in Africa (APRA) Programme of the Future Agricultures Consortium (FAC) in October-November 2020 to examine how COVID-19 is affecting food systems and rural livelihoods in eight countries – Ethiopia, Ghana, Kenya, Malawi, Nigeria, Tanzania, Zambia and Zimbabwe. It builds on a set of phone-based household surveys and key informant interviews conducted in those countries in June-July 2020, which served as the baseline for this research.<sup>1</sup> APRA will continue to monitor the situation as the response to the pandemic unfolds through a third round of data collection and analysis planned for the first quarter of 2021.

The second round of the rapid assessment found differential effects in the selected APRA field sites and households. The easing of control measures and still relatively low rates of infection in most study countries has allowed some households and communities to begin ‘bouncing back’ from or adapting to the disruptions caused by COVID-19. Some have reoriented their marketing activities to sell into more local value chains or diversify their off-farm business enterprises. Others have started to return to their farming and business activities they were pursuing before the pandemic began.

At the time, the disruptions caused by the restrictions imposed by national and local authorities have continued to be felt in many of the study communities. These have resulted less in what could be characterised as a ‘food production crisis’ and more of an intersecting ‘income-nutrition-livelihood crisis’, mainly by causing economic activities to decline, which in turn led to income loss and reduced household purchasing power, and a multitude of food-system wide shocks. Although most of the farming households interviewed said they were able to continue their farming activities, many experienced substantial losses in employment and income from both on- and off-farm sources, which has reduced their purchasing power. Trading activities were significantly curtailed due to a reduction in the number of outside traders or buyers coming to communities to purchase agricultural produce. The availability of transport also declined while prices have increased, thus reducing access to vital farm inputs and constraining the movement of goods to local and regional markets. In addition, many households reported a decrease in the availability of key staple foods available in local markets and an increase in food prices. This loss of income, decrease in food availability and increase in food prices is reflected in local diets, with a sizeable number of households stating that they have been reducing meals from 3 to 2 or even 1 meal a day and facing a shrinking basket of available foods in local diets.

## 2. Data

For this assessment, we followed up with the informants previously recruited from the areas surveyed as part of the APRA Programme’s panel studies and longitudinal studies of agricultural commercialisation and livelihood security during 2017-2020 in Ethiopia, Ghana, Malawi, Nigeria, Tanzania, Zambia and Zimbabwe (Matita, *et al.*, 2018; Alemu, *et al.*, 2019; Dzanku, *et al.*, 2020; Isinika, *et al.*, 2020; Muyanga, *et al.*, 2020; Matenga and Hichaambwa, 2017; Tozoneyi, *et al.*, 2020), and complementary studies in Kenya led by colleagues at the Tegemeo Institute of Agricultural Policy and Development of Egerton University<sup>2</sup> and in Zambia by collaborators at the University of Zambia with support from partners at the Institute for Poverty, Land and Agrarian Studies, the University of the Western Cape, South Africa.<sup>3</sup>

1 Implementation of the Round 1 survey and key informant interviews in Zambia was delayed for logistical reasons. That study took place in October 2020 and is reported here, along with the Round 2 results.

2 Tegemeo Institute has been collecting household-level data on various aspects of agriculture and rural livelihoods in Kenya for well over two decades. We have drawn on that panel for this study - [bit.ly/3noABiY](https://bit.ly/3noABiY)

3 Partners at the University of Zambia built on household-level dataset from a three-country study on ‘Land and Agricultural Commercialisation in Africa’ (LACA) under the Future Agricultures Consortium, which was supported by colleagues at PLAAS. They selected communities in the commercial farming areas in the Mkushi Farm Block for this study - [bit.ly/2WmtR9y](https://bit.ly/2WmtR9y)

The original APRA studies were mixed-methods analyses combining detailed household surveys with extensive qualitative research (focus group discussions, key informant interviews, life histories, etc.). While there were small differences in the exact nature of original sampling methods used in these studies, the selection of villages and local informants followed a rigorous approach using common guidelines and were meant to be representative of study areas that included highly commercialised households. Detailed rosters were available for each sample household, with the complete list of all members and their age, sex, education, occupations, and other socio-economic information. We also obtained contact phone numbers for household heads, which enabled the research teams to contact them for this study.

To implement the second round of our phone surveys, we re-interviewed female- as well as male-headed households sampled earlier (Appendix A). In total, 846 households were interviewed in Round 2 over October 2020, of which 210 (24.8%) were female-headed. Our Ethiopian study locations are spread across several communities (kebeles) in the Fogera Plain, where rice production and marketing are of primary importance. Communities in Ghana are based in the southwestern oil palm belt with a concentration of processing activities. The Kenya study locations were drawn from Tegemeo's panel and include diverse small-scale farming areas near the major urban markets of Mombasa and Nairobi. The sample communities in Malawi are in Mchinji and Ntchisi Districts where groundnuts, tobacco and maize are grown and were selected based on their proximity to trading centres in Central Region. The Nigerian households are located in Ogun and Kaduna States in some of the wards most affected by COVID-19, where both small and medium-scale producers are producing a variety of crops, including roots and tubers, maize and rice. The sample households in Tanzania are in villages in Mngeta Division that rely on rice production and marketing. In Zambia, study locations are in the Mkushi Farm Block in the Central Province, some 170 km south-east of the Copperbelt mining hub on the Great North Road linking Lusaka to Dar es Salaam. The area has attracted both small and medium-scale satellite vegetable farms that have been established on customary land surrounding the farm block. Finally, in Zimbabwe, the field sites are in Mvurwi Farming Area in Mazowe District, Mashonaland Central, where two farming models have emerged, the small-scale A1 and larger-scale A2 farms, which are producing maize and tobacco and are likely to experience disruptions to their production and marketing activities.

---

---

*“Some believe the COVID is real and others do not. Those who do not believe it is real have not seen close relatives getting infected or dying, so sometimes they tell us they think the virus is a hoax.”*

- Local Leader, Mpohor, Western Region, Ghana

*“The level awareness has not changed since the last interview. Everyone in the country is aware of COVID-19. However, people are no longer afraid... People are saying, ‘Corona is defeated and it has gone and left Malawi’.”*

- Agricultural Extension Development  
Coordinator, Ntchisi, Central Region, Malawi

---

---

### **3. Knowledge and spread of COVID-19**

Most respondents reported to be continuing to follow the guidelines in place at national level – with minor exceptions of 15% of the respondents in Ethiopia, 3% in Kenya, 5% in Malawi; and, a more substantial proportion of 64% in Tanzania and 37% in Nigeria. Respondents were asked again about COVID-19 symptoms<sup>4</sup> in their own household, as well as confirmed cases in either their own village or their district. There were few reported cases where at least one member had COVID-19 symptoms (Table 1) in households - ranging from none in Tanzania to about 12% in Malawi. Meanwhile, when asked about others in the village, some 12.2% respondents in Zambia and 12.1 % in Ghana stated that they were aware of at least a known member of the village reporting COVID-19 symptoms. Finally, many households said they knew of confirmed cases in other villages in their district – almost 48% in Zambia, 39% in Malawi and 24% in Ghana. Compared to the Round 1 interviews in June-July, we observed a decrease in the share of respondents reporting at least a member with symptoms within their household in all countries except Ghana, Nigeria and Zimbabwe. Furthermore, in all countries except Nigeria and Tanzania, we found an increase in the share of respondents reporting the presence of members with symptoms in their village. We asked the respondents about access to healthcare since June-July during the interviews in October. More than 80% of respondents reported be able to use their village health clinic or elsewhere (**Figure 1**), with the exception of Nigeria, where still close to two-thirds of respondents (71.6%) reported being able to access any healthcare providers. Compared to what was

4 High temperature, continuous cough, loss or change to your sense of smell or taste.

**Table 1: Presence of symptoms of COVID-19 - June-July and October 2020 (% respondents)**

Country	Have you or anyone in your household had COVID-19 symptoms?		Has anyone else in the village that you know had COVID-19 symptoms?		Have you heard of any confirmed cases of COVID-19 in other villages in your district?	
	June-July	Oct	June-July	Oct	June-July	Oct
Ethiopia	10.3	5.7	8.4	10.4	15.9	10.4
Ghana	1.8	1.9	6.4	12.1	55.5	24.3
Kenya	3.0	1.0	0.0	3.1	9.0	17.7
Malawi	9.6	11.7	4.4	7.2	48.2	38.7
Nigeria	5.4	0.9	12.6	11.0	21.6	23.9
Tanzania	3.9	0.0	3.9	0.0	15.7	0.0
Zambia	-	4.3	-	12.2	-	48.7
Zimbabwe	1.9	2.0	0.0	2.0	2.8	18.6
<b>All Countries</b>	<b>5.2%</b>	<b>3.5%</b>	<b>5.2%</b>	<b>7.4%</b>	<b>24.6%</b>	<b>23.4%</b>

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

observed in the first round in June-July, we find that in all countries except Ghana and Tanzania, respondents reported greater access to healthcare services, with Ethiopia and Nigeria reporting the largest differences compared to June-July.

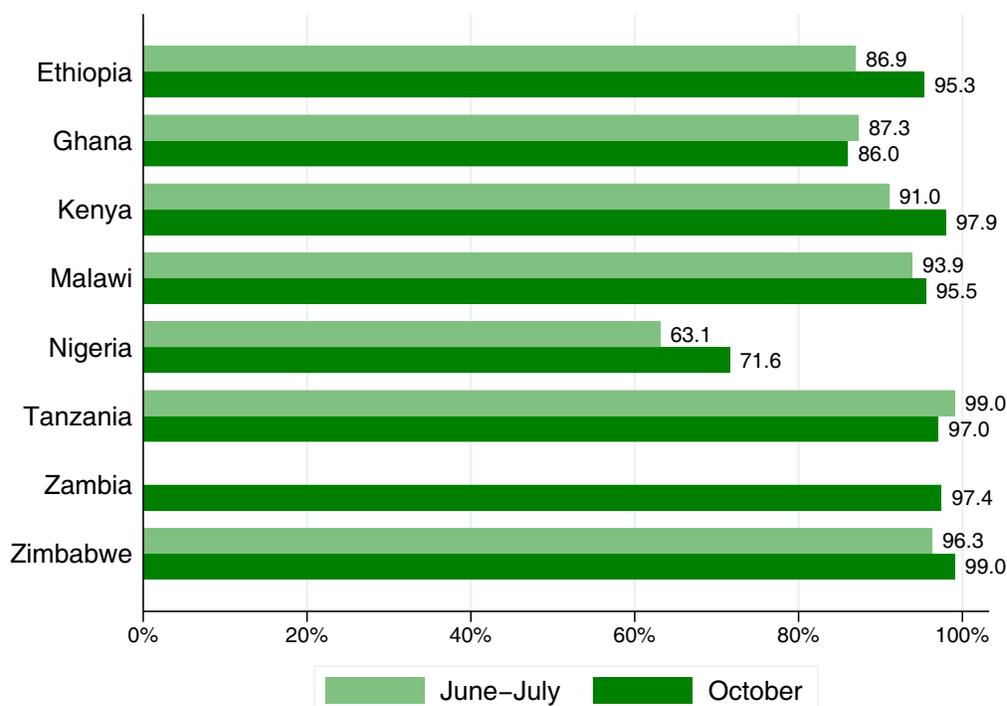
#### 4. Responses to COVID-19

With some COVID-19 related measures still in place in October in several countries, many individuals were still reducing their movements both within and outside their own village (**Figure 2**), with the exception of Tanzania, which never implemented a harsh lockdown.

Furthermore, excluding Tanzania, between 16% and 85% respondents in the study locations across the other countries reported that family members, relatives and friends who live outside of the village were prevented from visiting (**Appendix Table A2**). These numbers were highest for Zambia, Zimbabwe and Malawi.

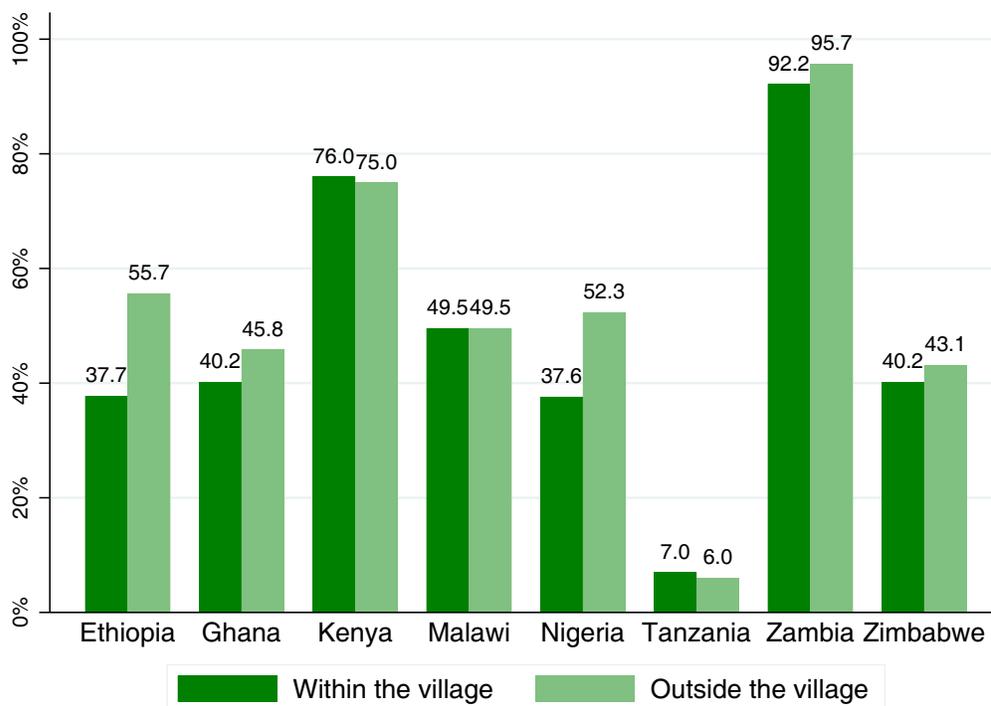
Compared to June-July, fewer (but still a large proportion) respondents reported a decrease in the number of buyers or traders coming to the village to do business (**Figure 3**). This includes Zambia, where 83.5% respondents reported a decrease in the number of buyers and traders coming to the village.

**Figure 1: Access to healthcare - June-July and October 2020, across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 2: Reported reduction in movements - since June-July and October 2020, within and outside village, across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Our study location in Ethiopia continued to stand out as the exception, as majority of respondents continued to report that they had not encountered any significant change in the number of buyers and traders coming to their villages, as government restrictions related to COVID-19 only disrupted their movement for a brief period. Overall, compared to what was observed in June-July, there is an increase in buyers and traders coming to the village in all countries, especially in Ghana, Tanzania and Zimbabwe.

The majority of respondents still reported that schools were closed in study areas across all countries, again, apart from Tanzania and with the new exception of Zimbabwe where more than 40% of the respondents have reported that schools were now open (Appendix Figure A1).

Many parents are still facing additional burdens of childcare responsibilities. Results (Table 2) show that the majority children were continuing to do schoolwork at home in the study areas in Ghana, Kenya and Zambia. Most girls and boys were doing more housework in all countries, with the exception of Malawi and Zimbabwe; and, boys in Ethiopia and Nigeria were also reported to be doing less. Most school-age girls and boys were also doing more farm work, except for Malawi and Zimbabwe, and girls in

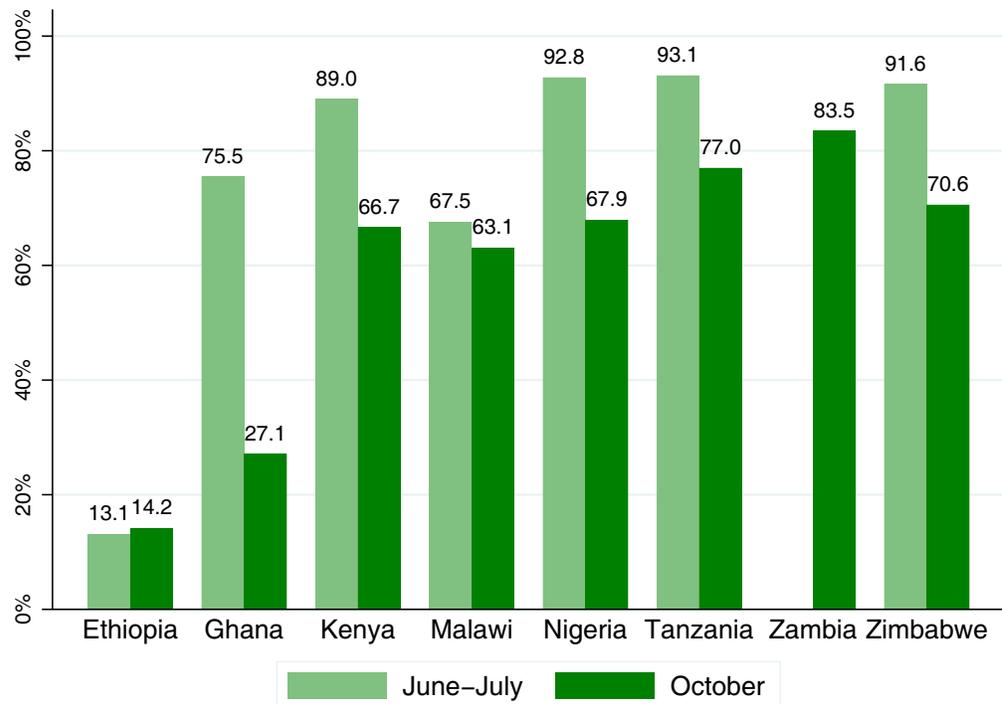
*“At the height of the COVID-19 crisis, movement of people and goods were restricted thereby bringing untold hardship to people (especially those who rely on daily travel to feed themselves). And people were not happy. But now [that these restrictions have been lifted], they feel better (though many are suffering poor employment).”*

- Village Secretary, Ijebu-East, Ogun State, Nigeria

*“The lockdown measures that closed movement into and out of Nairobi and other towns contributed to a lot of vegetables being lost on farms because the produce could not reach the market in time. Some marketplaces were also closed in Kiambu County and this affected farmers and traders who depend on them to buy and sell their wares. This led many traders with small private cars to convert them into mobile stores parked along the roads in the county from where they sold their produce. The markets have since reopened and the number of cars parked at the roadside to sell to consumers have reduced significantly.”*

- Extension Officer, Kiambu County, Kenya

**Figure 3: Reported decrease in buyers or traders coming to the village, June-July and October 2020, across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

*“The lockdown is no longer in place and intercity travels are now permitted, so movement of people and goods has pretty much returned to normal. There are more merchants and private companies coming into the area to contract farmers for the coming agricultural season.”*

- Extension Officer, Mvurwi, Mashonaland Central, Zimbabwe



Public and private assistance measures will be of primary importance in the wake of the COVID-19 pandemic. Credit: UNICEF Ethiopia/Nahom Tesfaye

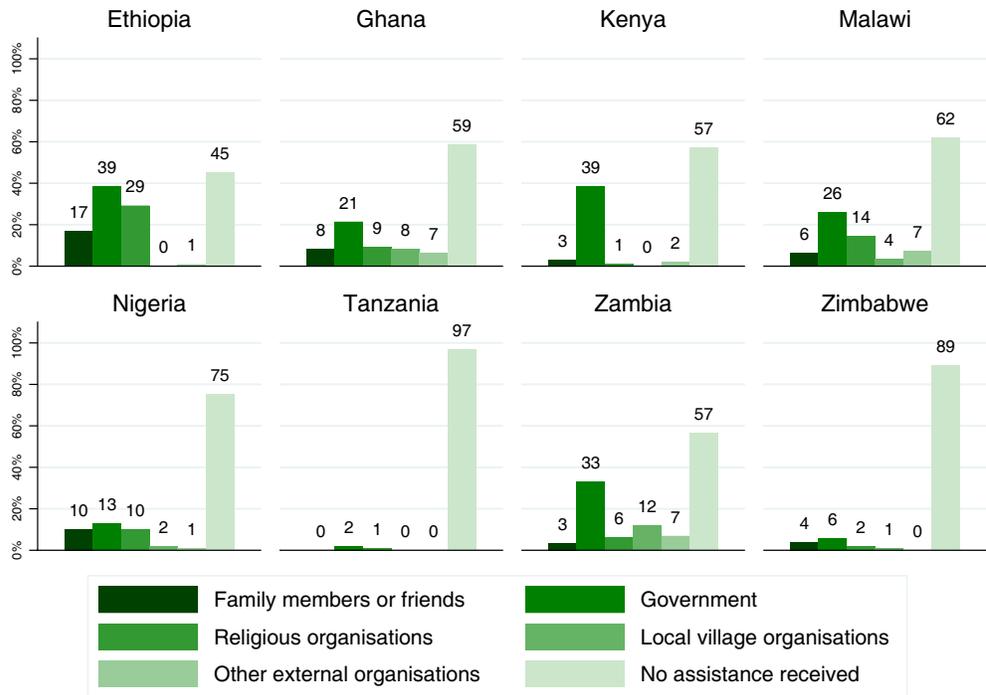
**Table 2: Children's activities at home if schools closed - June-July and October 2020, by girls and boys and across countries (%)**

Country	School work at home			More housework			More farm work			Paid work away from home			Nothing / sitting idle								
	Girls	Boys		Girls	Boys		Girls	Boys		Girls	Boys		Girls	Boys							
	June-July	Oct	June-July	June-July	Oct	June-July	June-July	Oct	June-July	Oct	June-July	Oct	June-July	Oct	June-July	Oct					
Ethiopia	39.3	45.3	39.3	60.7	58.5	9.3	24.5	50.9	46.7	50.9	62.6	56.6	0.0	3.8	0.9	4.7	1.9	0.9	0.9	4.7	
Ghana	60.0	64.5	53.6	70.0	69.2	55.5	60.7	50.9	50.9	51.4	45.5	42.1	0.9	0.9	7.3	1.9	16.4	3.7	13.6	4.7	
Kenya	59.0	71.9	65.0	67.0	72.9	62.0	69.8	55.0	60.4	60.4	62.0	64.6	3.0	4.2	4.0	7.3	11.0	13.5	7.0	12.5	
Malawi	20.2	25.2	21.9	43.9	40.5	30.7	28.8	24.6	27.9	27.9	31.6	39.6	8.8	8.1	18.4	21.6	28.1	20.7	26.3	19.8	
Nigeria	50.5	45	42.3	33	85.6	51.4	49.5	32.1	52.3	27.5	76.6	53.2	9.9	10.1	15.3	18.3	28.8	18.3	27.9	20.2	
Tanzania <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zambia	60.9	63.5	63.5	75.7	75.7	67.8	67.8	40.9	40.9	40.9	63.5	63.5	5.2	5.2	7	7	17.4	17.4	13	13	
Zimbabwe	74.8	41.2	69.2	41.2	76.6	43.1	60.7	33.3	57.9	20.6	59.8	22.5	0.9	0	1.9	0	31.8	6.9	34.6	4.9	
<b>All Countries</b>	<b>50.2</b>	<b>50.3</b>	<b>48.1</b>	<b>49.2</b>	<b>58.7</b>	<b>44.4</b>	<b>45.2</b>	<b>47.6</b>	<b>39.7</b>	<b>39.7</b>	<b>56.1</b>	<b>48.9</b>	<b>4.0</b>	<b>4.7</b>	<b>8.2</b>	<b>8.8</b>	<b>19.7</b>	<b>11.9</b>	<b>18.6</b>	<b>11.5</b>	

Source: Own calculations from APRA COVID-19 Rapid Assessment First and Second Round.

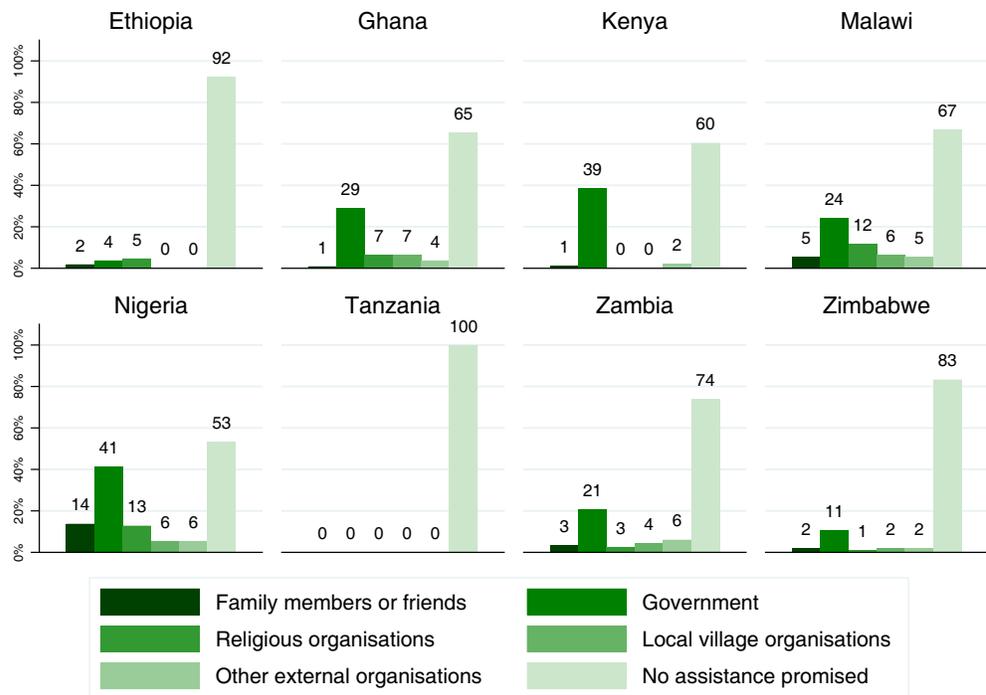
5 Schools remained open throughout the Round 2 study period in Tanzania

**Figure 4a: Reported promised assistance since June-July 2020 - by source and across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 4b: Reported access to assistance since June-July 2020 - by source and across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Nigeria and Zambia were also doing less. The stark difference between housework activities of girls and boys in Ethiopia and farm work in Nigeria persists as observed in Round 1, which again relates to their common gender roles in the study areas.

With likely further increases in the number of jobs lost during the COVID-19 pandemic, public and private social assistance measures will be of primary importance to continue to support households in absorbing the shock in the short-term. We asked

---

---

*“The lockdown is no longer in place and intercity travels are now permitted, so movement of people and goods has pretty much returned to normal. There are more merchants and private companies coming into the area to contract farmers for the coming agricultural season.”*

- Extension Officer, Mvurwi,  
Mashonaland Central, Zimbabwe

---

---

respondents whether they were promised and received any type of assistance and its sources. Based on the responses on promised assistance, we find that most individuals in all countries were not promised any form of emergency assistance. Where assistance was promised, governments represented the main source in all countries except Tanzania (**Figure 4a**).

Looking at assistance received since June-July, we still find two different clusters of countries by reported access (**Figure 4b**), but identify different countries in these clusters. First, 39% of respondents in our study areas in Ethiopia and Kenya and 33% in Zambia reported to have received some governance assistance in response to the COVID-19 crisis. Second, in all countries except Ethiopia, the majority of informants reported receiving no assistance from any sources. In addition, family and friends continue to be important sources of support in Ethiopia, while assistance from religious organisations was also important in Ethiopia, Malawi and Nigeria.

Compared to Round 1, we now observe a general decrease in the share of households receiving any type of assistance. For example, while in Ghana and Kenya more than half of the respondents reported to have received some government assistance in June-July, only 29% (Ghana) and 39% (Kenya) of the households reported to have received government assistance in October. Similarly, while during the first round in Tanzania, 30% of the households reported to have received any type of assistance, in October only 3% of the respondents reported having received any assistance.

Comparing promised (**Figure 4a**) and received (**Figure 4b**) assistance, it is interesting to notice that the shares generally do not differ substantially across countries, with the exception of Nigeria, where 47% of the households were promised assistance from various sources but only 25% actually received it.

Regarding government assistance specifically, some 41% of the Nigerian households stated that they were

---

---

*“Still people are helping each other in case of any need that arises. That is, if someone is in a great need he will just find help from his relative, friends or neighbours. As a village, we have not received any technical or humanitarian support either from the government or any other organisation.”*

- Village Officer, Kilombero District,  
Morogoro Region, Tanzania

---

---

*“Government did not provide anything in reality to help with COVID, except through the media for sensitisation and raising awareness. Some religious bodies, NGOs, financial institutions and individuals provided support to the community in the form of food relief and wash basins.”*

- Lead Farmer, Chikun LGA, Kaduna State, Nigeria

---

---

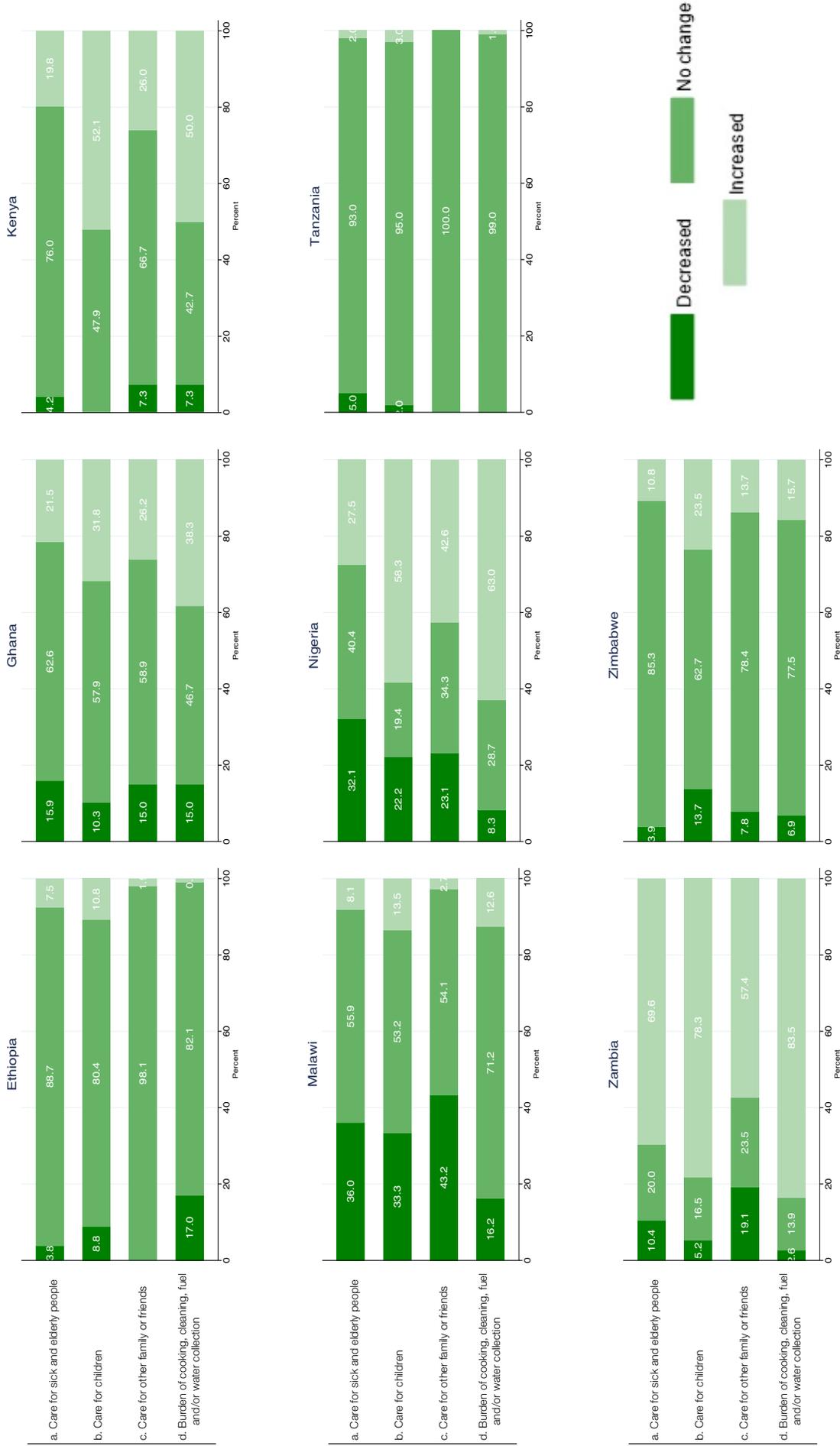
promised assistance but only 13% said they received it.

COVID-19 related measures, school closures and job displacements are expected to have an impact on daily responsibilities within the household. However, overall, most of the respondents in all countries except Nigeria and Zambia continue to report only minor changes in daily responsibilities in terms of caring for sick and elderly people, children (except Kenya), other family or friends or having increased housework, such as cooking, cleaning, fuel and/or water collection (**Figure 5**). The former is especially true in Ethiopia, Kenya, Tanzania and Zimbabwe.

## **5. Farming, labour and marketing**

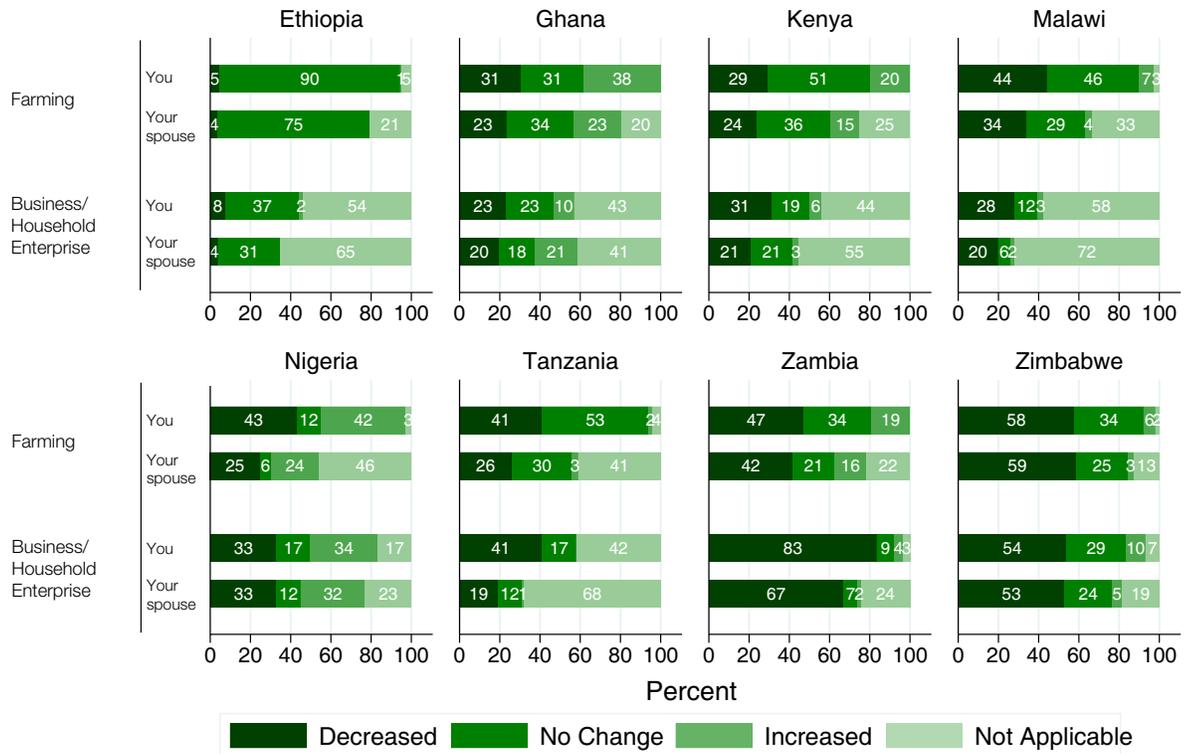
We asked respondents again about the impact of the COVID-19 pandemic on their participation in either farming or business/household enterprise activities – for them and spouse. Again, two patterns are visible across the countries (**Figure 6**). First, most respondents in Ethiopia, Ghana, Kenya, Malawi (excluding spouse’s activity) and Tanzania reported no significant changes in participation in farming activities but decreased participation in their business activity (except Ethiopia), for either themselves or their spouse. Second, in Nigeria, Zambia and Zimbabwe, the majority of respondents reported a decrease in their participation in farming activities, as well as a decreased commitment to business activities for themselves or their spouse. Overall, the patterns appear to have changed in Ghana, Malawi and Ethiopia.

**Figure 5: Reported changes in daily responsibilities in the household since June-July 2020 - across countries**



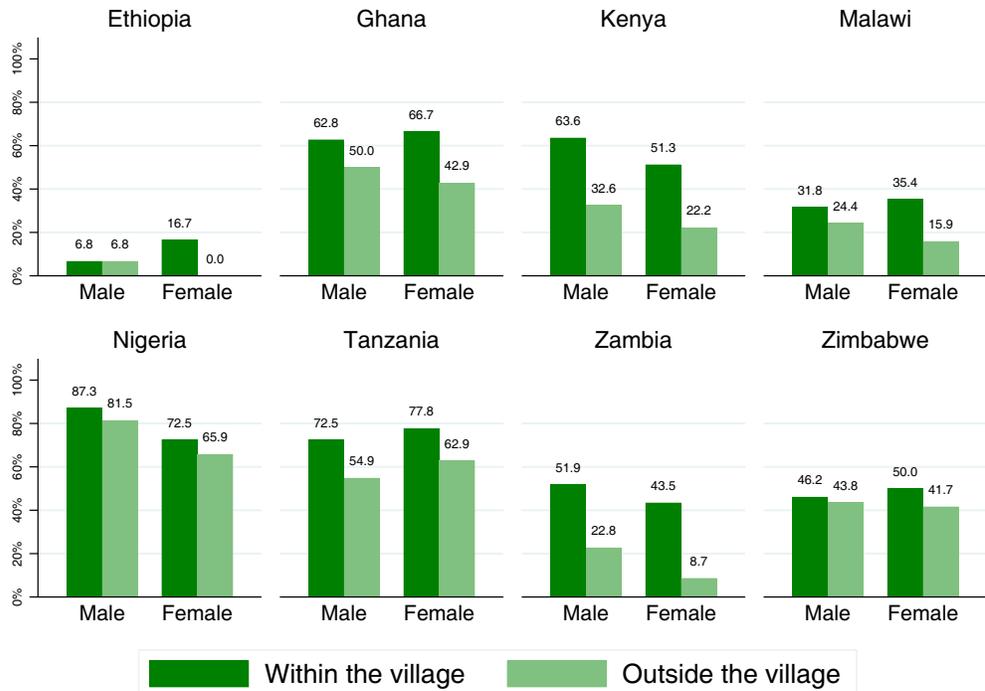
Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 6: Participation in farming and business since June-July 2020 - respondent and spouse, across countries**



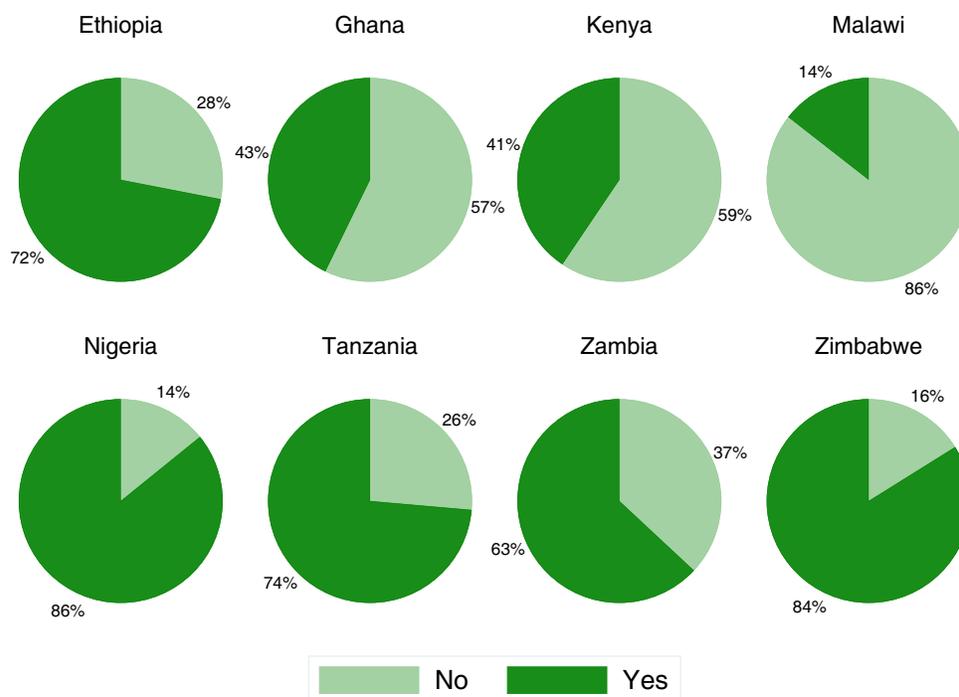
Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 7: Reported access to off-farm work since June-July 2020, across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 8: Access to hired labour since June-July 2020, across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

*“When COVID-19 struck in March, many farms were not welcoming people they did not know, so demand for farm labour was generally low. Supply was also low because of government’s public health guidelines and restrictions... Since many of the restrictions were lifted from July, people have generally become less cautious about COVID-19 and farms have become more willing to employ people. But demand for labour has generally remained low because many businesses and farms have not resumed full operation, while the general economic situation has made farmers have less purchasing power to hire labour. In Muranga County, most horticultural farms, especially those that produce for export markets, ceased or reduced operation, reducing their demand for labour.”*

- Agricultural Officer, Muranga County, Kenya

*“Since most people have no money because of the poor market this year, there has been an increase of labour in the village which led to the decrease of labour costs. Previously, labourers were paid 40,000 Tanzania Shillings to cultivate an acre, but now you can even pay someone 30,000 to 35,000 Tshs and he/she will do the work, while in the last season it was difficult for them to accept it.”*

- Secretary of Village Rice Committee, Kilombero District, Morogoro Region, Tanzania

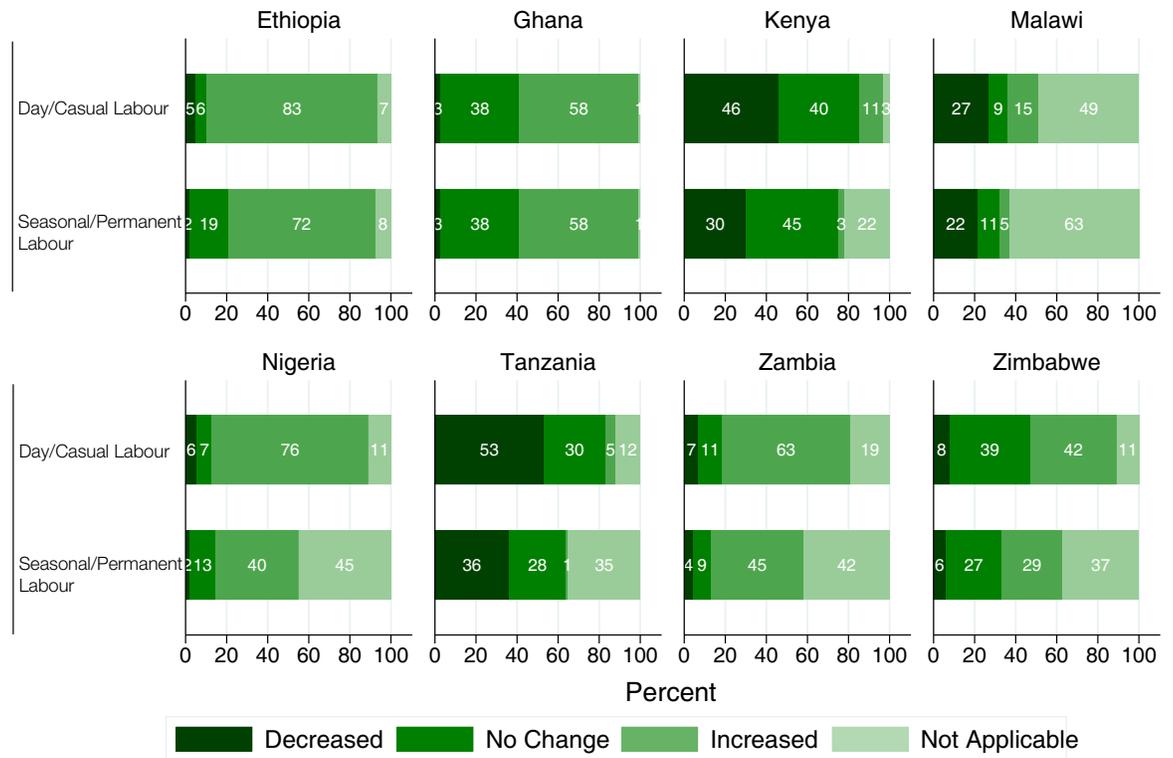
#### **a. Access to off-farm work<sup>6</sup>**

In the first round, we found that COVID-19 was affecting the access to work activities outside own household. Many individuals continue to report being cut-off from

off-farm work opportunities (Figure 7). Overall, less than half of the respondents in Ghana, Kenya, Nigeria, Tanzania, Zambia and Zimbabwe reported being able to access off-farm work within their own village in Round 2. In the other countries, the majority of the respondents

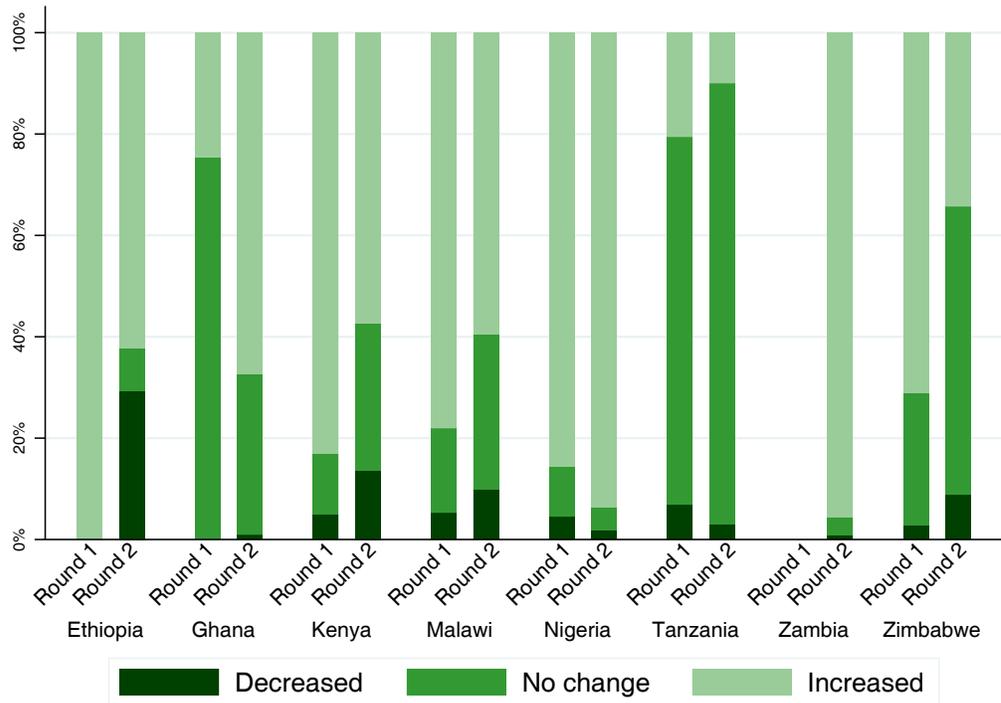
<sup>6</sup> Regarding “off-farm work in your village”, the percentages of respondents replying “Not Applicable” are: Ghana (3%), Kenya (23%), Nigeria (19%), Zimbabwe (30%); regarding “off-farm work outside the village”, the percentages are as follows: Ghana (4%), Kenya (26%), Nigeria (30%), Zimbabwe (30%).

**Figure 9: Changes in cost of hired labour since June-July 2020 – by type and across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 10: Changes in the cost of transportation of people and goods across countries – June-July and October 2020**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

reported being able to access off-farm work within their village; and, in Ethiopia, Ghana, Kenya, Malawi and Zambia, outside their own. There were some differences by gender of household head in these countries, with female headed households in Kenya and Zambia reporting significantly lower access to off-farm work.

### **b. Hired labour**

The COVID-19 pandemic presented a challenge for the availability of hired labour, both for continuing farming or business activities and in terms of the increased cost of labour. We asked respondents if they had been able to hire workers for their farming or business activities since June-July (**Figure 8**). The majority of the respondents in Ethiopia, Nigeria, Tanzania, Zambia and Zimbabwe reported that they have been able to hire workers. However, access to hired labour continues to be disrupted in Ghana, Kenya and Malawi – with 57% of the respondents in Ghana, 59% in Kenya and 86% in Malawi reporting being unable to hire workers.

We also asked respondents about the impact of the response to COVID-19 on the cost of labour since June-July – both for day/casual labour and for seasonal/permanent labour. Differently from Round 1, the majority of respondents in Ethiopia, Ghana, Nigeria, Zambia and Zimbabwe reported an increase

---

---

*“Our largest concern is the lack of market. Some of us had a bumper harvest but were unable to get buyers. And this has led to some form of hardships as prices for our produce are low.”*

- Secretary of Village Rice Committee,  
Kilombero District, Morogoro Region, Tanzania

*“Sale of farm produce has been affected, especially the regional market. The Congo DR took most of the tomatoes produced here, but when borders closed due to COVID-19, farmers were in trouble. The alternative was the Soweto market in Lusaka city but there was too much supply there and this affected prices. Some boxes of tomatoes were just being dumped. Prices for agricultural inputs also increased. So, low incomes from sales of produce and higher prices for inputs meant bad business for farmers here.”*

- School Chairman, Mkushi District, Central Province, Zambia

---

---

in the cost of labour (**Figure 9**). Interestingly, among those hiring labour in Kenya, Malawi, and Tanzania, a sizeable number of respondents reported lower costs for day labour (and also seasonal labour in Malawi and Tanzania), perhaps reflecting an increase in the supply of farm workers.

### **c. Sales**

In Round 1 of this survey, we found that COVID-19 was creating constraints for accessing markets for buying and selling products. In the second round, we asked respondents about their ability to sell at the farm gate, in local markets, in district or regional markets, as well as in national markets and across the border since June-July. Among those selling their products, most respondents in all countries except Ethiopia reported significant constraints in their ability to sell their produce (**Appendix Table A3**). Most stated that they sell primarily at the farm gate or in local, district or regional markets. However, the ability to sell farm produce appears to be slowly improving in Nigeria and Zimbabwe, especially at farm gate level.

---

---

*“Transport services are running, and the cost of transportation is based on the normal tariffs. There is now trade exchange between districts. If government tries to impose movement restrictions to control the spread of the virus, people may not accept the decision.”*

- Community Leader, Libkkemkem District,  
South Gondar, Amhara Region

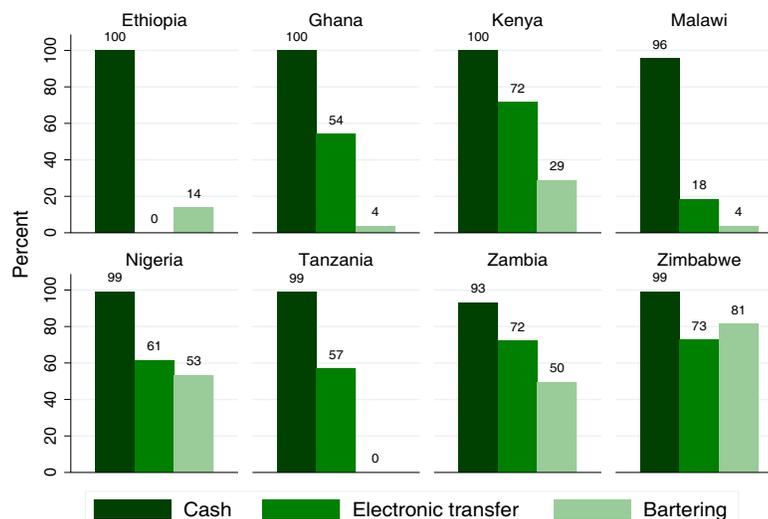
---

---

### **d. Transport**

Movement restrictions since the beginning of the pandemic was affecting both the availability and the cost of transportation. We asked respondents about their ability to hire transport, and the costs and possible consequences for buyers coming to the village since June-July. We find different scenarios in the study areas. Apart from those in Tanzania and Zimbabwe, most respondents continued to report an increase in the transport costs (**Figure 10**) because of COVID-19. Despite these rising costs, most respondents reported still being able to hire some transport services, except for those in Kenya (**Appendix Table A4**). Furthermore, aside from farming households in Ethiopia, most of our respondents still reported a decrease in the number of buyers coming to their area to buy produce directly. And in some cases, farmers were continuing to sell locally rather than to the buyers who previously were coming from other areas. Compared to June-July, while

**Figure 11: Reported form of payment for business transactions since June-July 2020 - across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

*“It has been hard for farmers to access... agricultural extension services because we had to reduce the number for people attending meetings and we had to make sure the meetings were done within an hour. If there is some new information or inputs to share, you were to inform the farmers and ask them to come individually to collect and sign for them and tell them what to do without having meetings.”*

- Agriculture Camp Officer, Mkushi District,  
Central Province, Zambia

in Ethiopia, Kenya, Malawi, Tanzania and Zimbabwe we observe a lower share the number of respondents reporting an increase in the cost of transportation, the opposite is valid for Ghana and Nigeria.

#### e. Transactions

In terms of reported means of payment for business transactions (**Figure 11**), there are no major changes in the use electronic transfers and bartering. Use of electronic transfers in Ethiopia and Malawi continue to be low, but remain particularly popular in Zimbabwe (73%) and Kenya and have risen in popularity in Zambia (72%) and Nigeria (61%). The use of bartering as a means of handling some business transactions was still common in Zimbabwe (81%) as well as Nigeria (53%) and Zambia (50%).

#### f. Availability of agricultural services

We asked respondents if the COVID-19 pandemic had affected the availability and prices of services for agricultural production since June-July. Respondents

were asked again about the availability of six types of common services for agriculture, namely: i) Agricultural land to rent; ii) Farm inputs; iii) Tillage services; iv) Agricultural extension services; v) Loans or credit; and vi) Concessionary loans or loan payment holidays. In Tanzania and Zimbabwe, most respondents using services for agricultural production stated that they observed no change in availability since June-July (**Figure 12**). It is also interesting to note that in the same countries, the large majority of the respondents observed a decrease in the availability of concessionary loans or loan payment holidays.

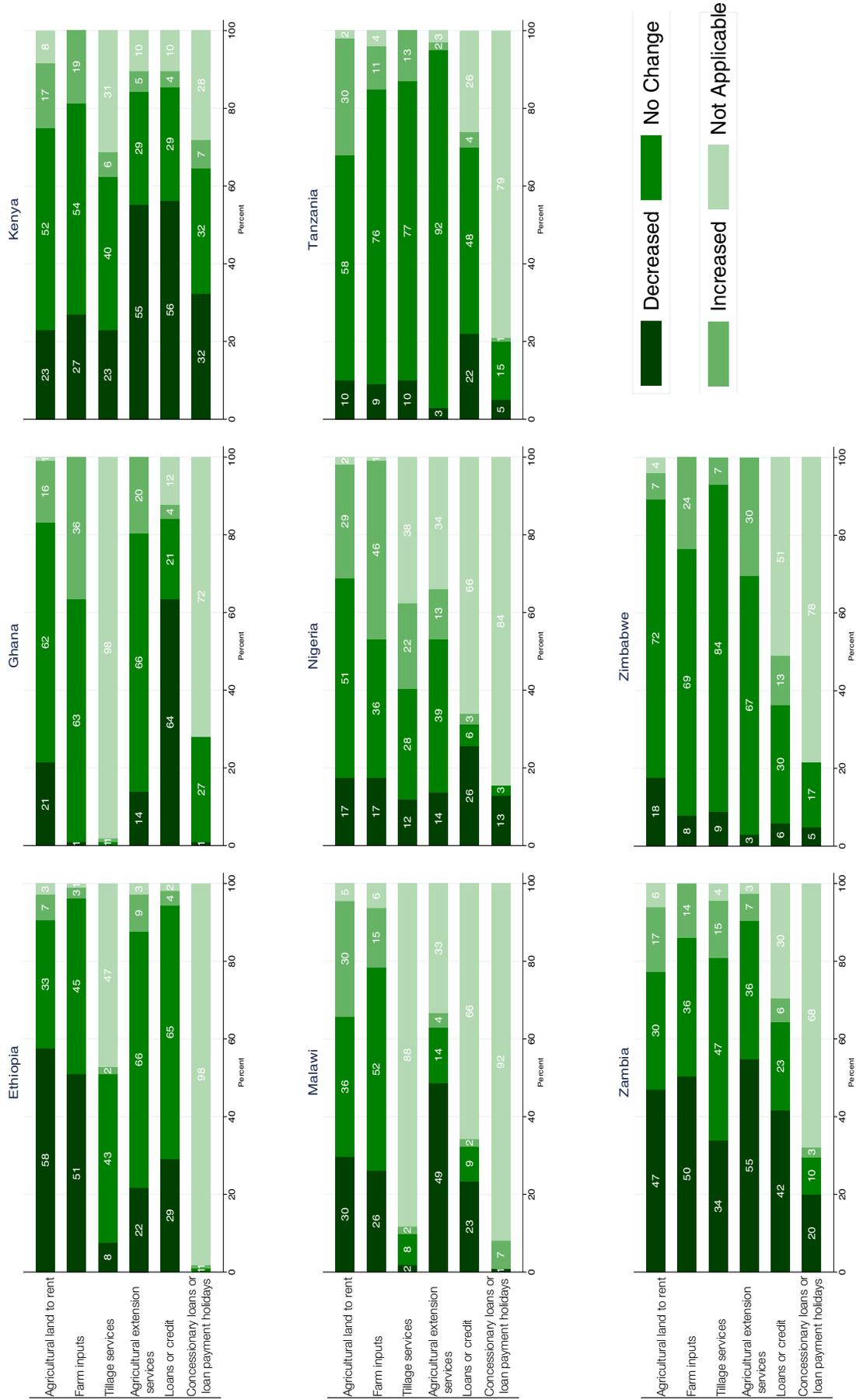
For the cost of such services since June-July (**Appendix Table A5**), we find that among the most commonly used services – agricultural land rental and farm inputs – the majority of respondents in all countries except Tanzania (and Kenya and Ghana for agricultural land) reported an increase in price.

### 6. Food and nutrition security

To understand how the COVID-19 pandemic has continued to affect household food and nutrition security in our study households, we asked the respondents if the availability and prices of food items in local markets had been affected since June-July. We found that in this round, a majority of respondents reported reduced availability of several food items in Ethiopia and Zambia, but there were fewer changes in the general availability of foods in other countries. Further, as in the previous round, most respondents continued to encounter increases in food prices (**Appendix Table A6**) – with the exception of Tanzania and Zimbabwe.

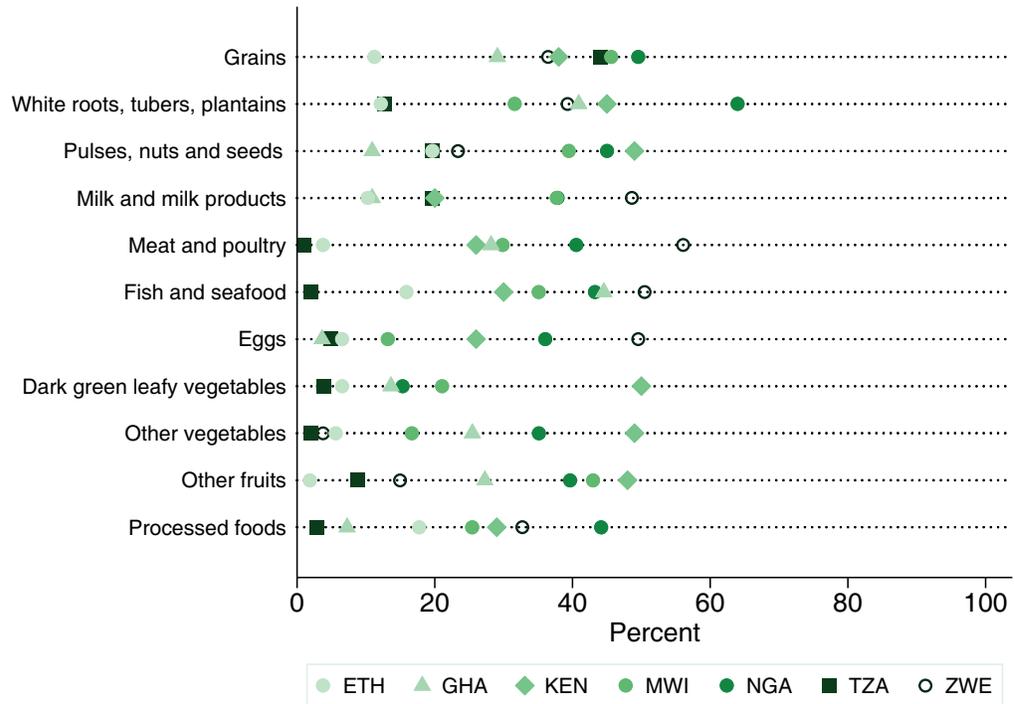
Since June-July, white roots, tubers, plantains; vegetables and fruits are the most common food

Figure 12: Availability of services for agricultural production since June-July 2020 - across countries



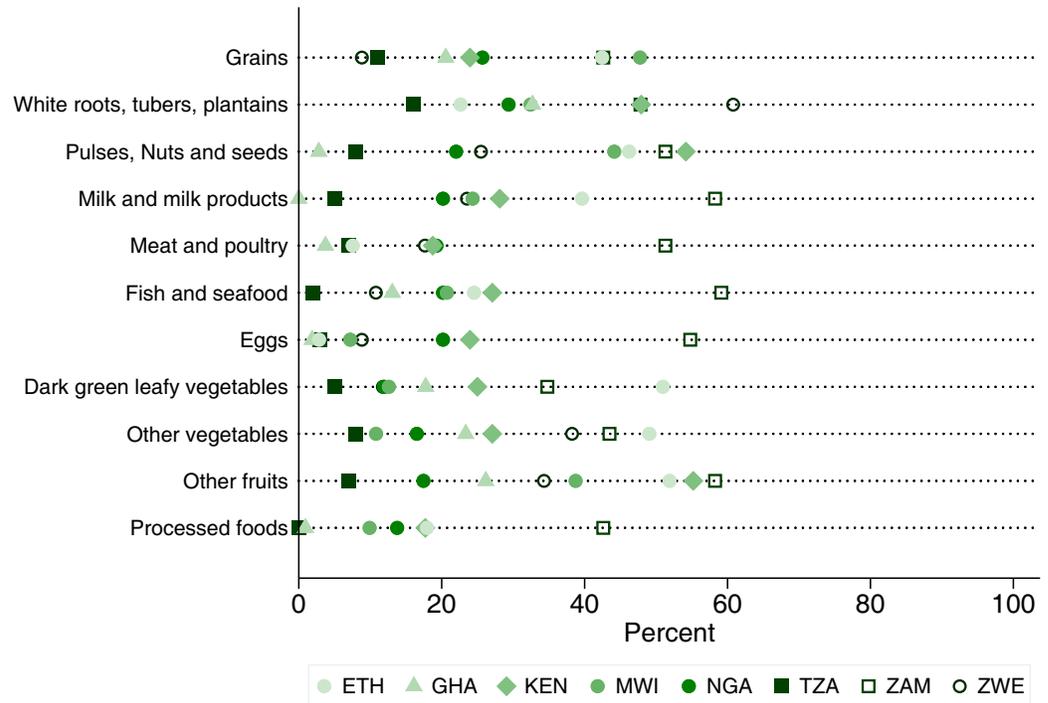
Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure 13 Reported decrease in availability of food items in local markets, June-July 2020 – across countries**



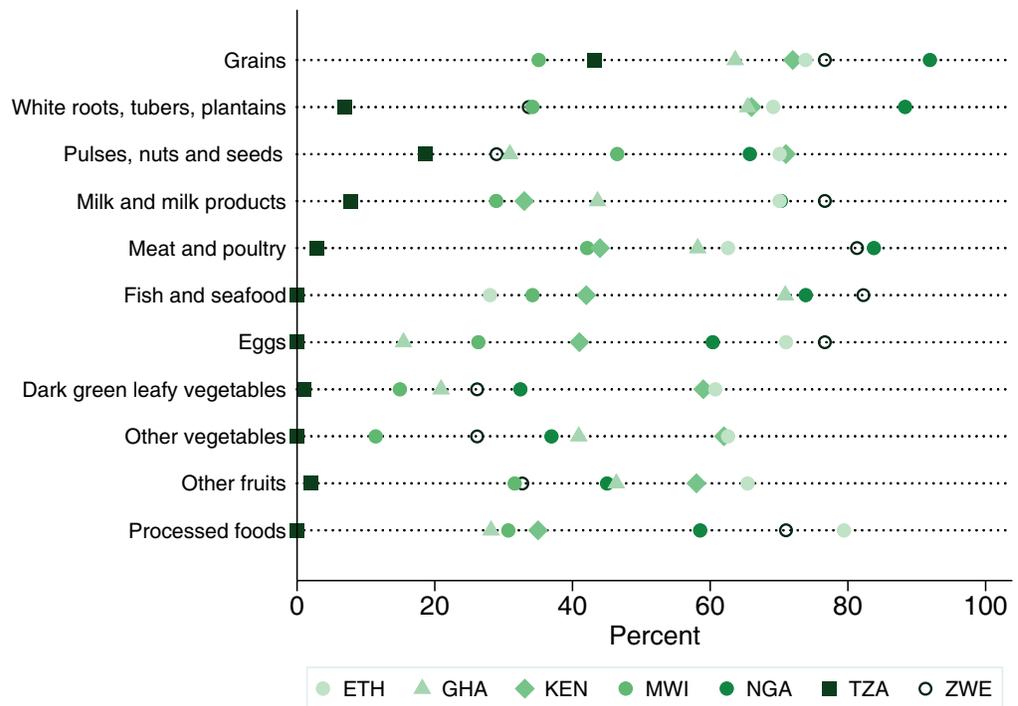
Source: Own calculations from APRA COVID-19 Rapid Assessment First Round.

**Reported decrease in availability of food items in local markets, October 2020 – across countries**



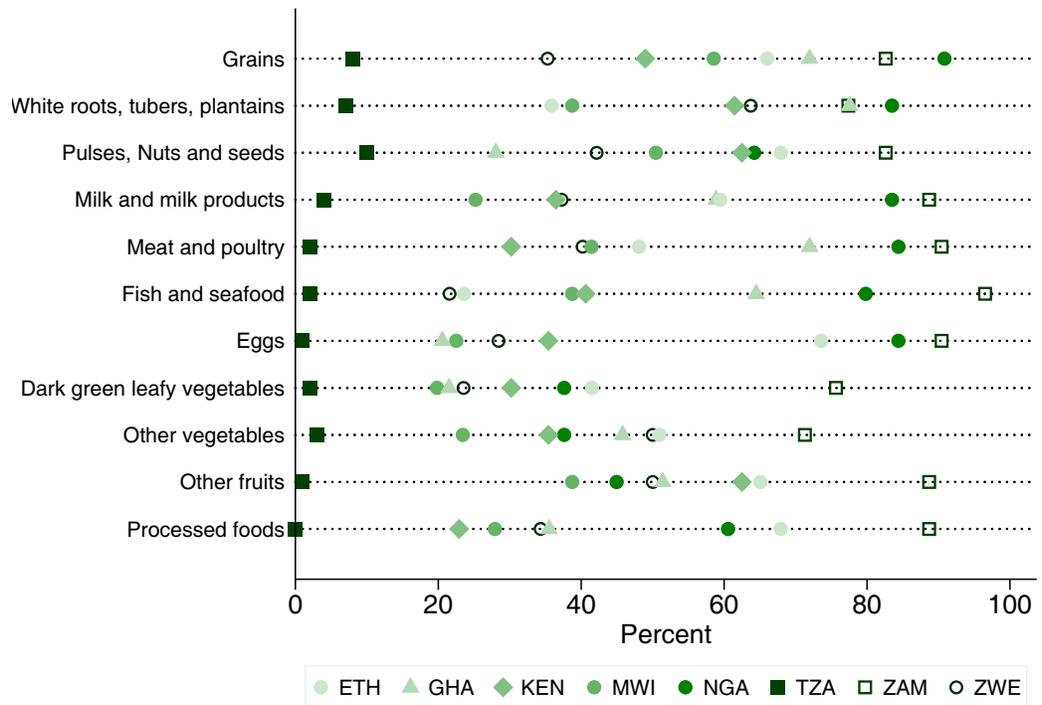
Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Figure 14 Reported increase prices of food items, June-July 2020 – across countries



Source: Own calculations from APRA COVID-19 Rapid Assessment First Round.

Reported increase prices of food items, October 2020 – across countries



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

---

---

*“Food supply in local markets is currently normal. During the lockdown, the supply of food in local markets was above normal because many traders brought their produce there after the cessation of movement into and out of Nairobi, which is the largest market... When cessation of movement was lifted on 7th July 2020, the supply of food in local markets started to normalise and prices began to rise and have so far reached levels that are expected during such time of the year.”*

- Agricultural Officer, Kiambu County, Kenya

---

---

groups where availability had declined (**Figure 13**). Interestingly, overall, for several food items, respondents reported that availability in local markets appears to have improved since the last round. The exception is Zambia, where food availability issues appear quite stark as nearly half of all respondents reported a decrease in availability of several food groups – especially milk and milk products; fish and seafood; eggs; and other fruits.

In general, there is still reported decline in availability of some specific food items in several countries. Zambia stands out for its sizeable decrease of several food groups in local markets. An explanation for this may be the limited trading and movement during the reporting period in the study areas.

In terms of changes in food prices (**Figure 14**), most respondents in Nigeria, Zambia, Zimbabwe and Ethiopia<sup>7</sup> reported increases across several food groups since June-July. Grain, pulses, nuts and seeds prices were most affected. An overwhelming majority of respondents in Zambia reported an increase in price in all food items and, in Nigeria, the majority of respondents reported significant increases in the

---

---

*“The only food that is now in short supply is cassava. But the prices have really increased. We buy them at twice the prices we used to buy.”*

- Local Leader, Mpohor, Western Region, Ghana

---

---

---

---

*“Prices of maize have picked up due to low supply and high demand. Prices have increased from 120 to 160 Malawi Kwacha per kilogram. Farmers who sold their maize to vendors at very low prices now have no maize and are now buying the same maize from vendors at K180 per kg.”*

- Agricultural Extension Development Coordinator, Ntchisi, Central Region, Malawi

---

---

price of grains; white roots, tubers, plantains; milk and milk products; meat and poultry; fish and seafood; and eggs. Compared to June-July, in all countries except Nigeria, we do not observe any major change in the share of respondents reporting price increases across the listed food items; in Nigeria, on contrary, we observe a greater share of respondents observing increases in price of several food items.

We also asked respondents about their access to food since June-July. **Table 4** lists the eight questions drawn from the Food Insecurity Experience Scale (FIES) of FAO<sup>8</sup> and the percent of households responding positively to each.<sup>9</sup> Responses by a sizeable number of households in Zambia (40.9%), Kenya (39.6%) and Malawi (34.2%) indicate that they experienced severe food insecurity since June-July, confirming that they “went without eating for a whole day because of a lack of money or other resources”. In particular, Malawi, Nigeria and Zambia stand out in terms of respondents’ actual actions to reduce or stop eating. Compared to June-July, Ethiopia, Ghana, Nigeria and Zimbabwe reported a lower average FIES score, while Kenya, Malawi and Tanzania reported a higher score.

To understand how overall food security status varies, we used the set of eight questions to create an indicator on a scale 0-8, with households scoring 0 being the most food secure and those scoring 8 the most food insecure. Households in Kenya, Malawi, and Zambia score the highest; with Ethiopia, Ghana and Tanzania score close to the average across all countries.

## **7. Cost of living and relative poverty**

We asked respondents if, since June-July, COVID-19 had caused any change in the overall cost of living

---

7 In contrast with findings in De Brauw *et al.* (2020) that find few effects on food availability or costs in Addis Ababa.

8 See *The Food Insecurity Experience Scale* of FAO - <http://www.fao.org/3/a-bl354e.pdf>

9 The degree of food insecurity implied by a question increases as one moves down the list of questions. This explains why the percent of households responding positively to a question decreases as one moves down the list.

Table 4: Food Insecurity Experience Scale (FIES) (%)

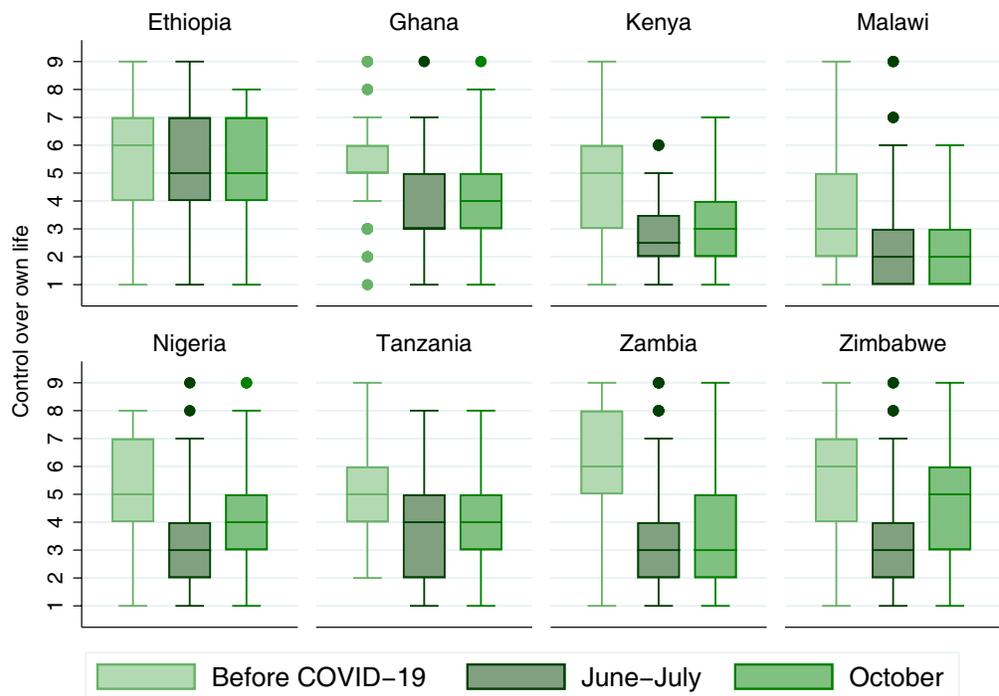
	Ethiopia		Ghana		Kenya		Malawi		Nigeria		Tanzania		Zambia		Zimbabwe		All	
	June-July	Oct	June-July	Oct	June-July	Oct	June-July	Oct										
Worried about not having enough food to eat because of a lack of money or other resources	64.5	39.6	55.5	52.3	94.0	83.3	76.3	87.4	81.1	69.7	76.5	66	-	85.2	79.4	70.6	75.1	69.4
Unable to eat healthy and nutritious food because of a lack of money or other resources	42.1	34.9	40.0	36.4	92.0	80.2	78.1	89.2	82.0	73.4	50.0	71	-	70.4	73.8	80.4	65.4	66.9
Ate only a few kinds of foods because of a lack of money or other resources	30.8	33	58.2	55.1	90.0	83.3	78.1	87.4	81.1	77.1	51.0	71	-	76.5	82.2	81.4	67.4	70.6
Had to skip a meal because there was not enough money or other resources to get food	9.3	19.8	48.2	45.8	54.0	69.8	57.0	76.6	79.3	61.5	35.3	28	-	68.7	41.1	38.2	46.6	51.4
Ate less than you thought you should because of a lack of money or other resources	24.3	21.7	52.7	49.5	66.0	78.1	70.2	82	79.3	74.3	33.3	35	-	70.4	62.6	60.8	55.8	59.2
Ran out of food because of a lack of money or other resources	5.6	3.8	24.5	22.4	52.0	56.3	53.5	66.7	64.9	52.3	18.6	15	-	53	32.7	32.4	36.2	38.1
Were hungry but did not eat because there was not enough money or other resources for food	4.7	4.7	24.5	14	47.0	55.2	48.2	64.9	63.1	46.8	18.6	17	-	54.8	21.5	22.5	32.8	35.3
Went without eating for a whole day because of a lack of money or other resources	5.6	2.8	0.9	3.7	16.0	39.6	30.7	34.2	18.0	15.6	5.9	1	-	40.9	7.5	10.8	12.3	18.8
<b>Food Insecurity Experience Scale (FIES) min=0; max=8</b>	<b>1.87</b>	<b>1.60</b>	<b>3.05</b>	<b>2.79</b>	<b>5.11</b>	<b>5.46</b>	<b>4.92</b>	<b>5.88</b>	<b>5.49</b>	<b>4.71</b>	<b>2.89</b>	<b>3.04</b>	<b>-</b>	<b>5.20</b>	<b>4.01</b>	<b>3.97</b>	<b>3.92</b>	<b>4.10</b>

Source: Own calculations from APRA COVID-19 Rapid Assessment-Second Round.

*“As we speak, most people don’t have money and their economic status is very bad, because most of them depend on agriculture. This means if they don’t sell their produce for a good price, they will fail to meet their needs... Most of people’s purchasing power has gone down because almost 90% of them have not been able to sell their produce for a good price. Hence, things are not good now for most of the people when it comes to their ability to buy food and other needs.”*

- Village Executive Officer, Kilombero District, Morogoro Region, Tanzania

**Figure 15 Reported perceived control over own life over time – across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Note: Boxplot where the middle line inside the box is the median value and the box represents the interquartile range.

(COL) of the household. We continue to find slightly contradictory results (Carreras, Saha and Thompson, 2020), as more than half of all respondents in all countries except Ethiopia experienced some rise in COL, but significant numbers of households in several countries also report no changes (Ghana and Zimbabwe) or even a decrease in their living costs (Kenya).

Finally, using the nine-step ladder (Ravallion, 2012),<sup>10</sup> we asked again if the COVID-19 pandemic had any impact on individuals’ perception about the control over their own life. The results (Figure 15) over time, and especially in comparison with scores from June-July, suggest that respondents are now reporting, either similar perception of control over their life (Ethiopia, Ghana and Kenya), or higher average scores in October compared to June-July (Nigeria and Zimbabwe). This result suggests that individuals are starting to perceive more control

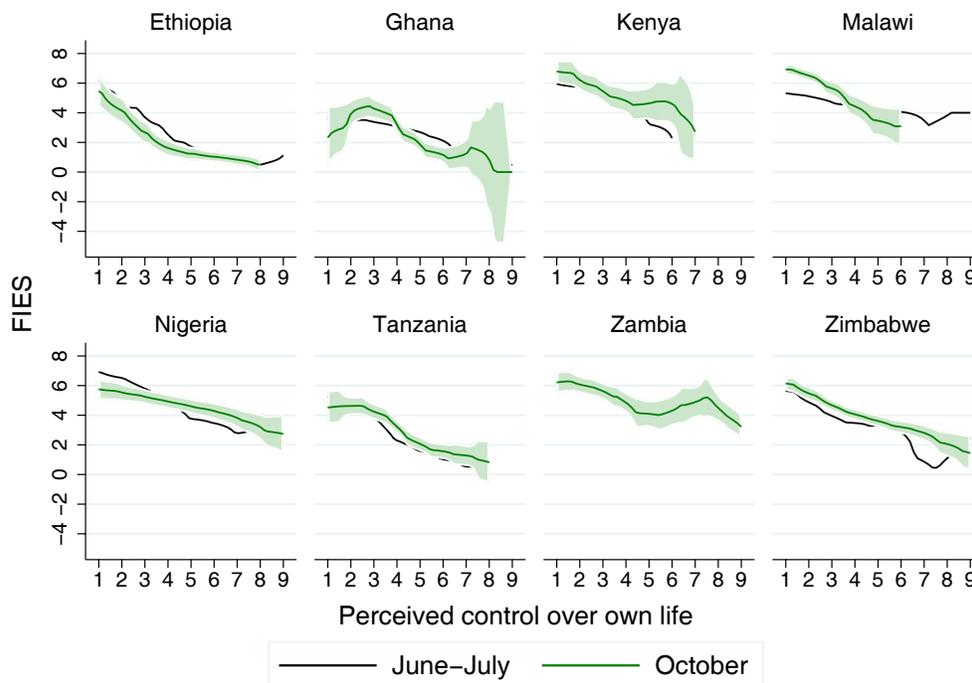
over their own life as several countries ease lockdown restrictions and economic activities begin.

To understand any changes in the relationship between overall food security status and individuals’ perceptions of the control over their own lives, we regressed perceived position on the ladder (1-9) in October against the household’s new reported FIES score. Similarly to what observed in June-July, the FIES score is still strongly and negatively associated with a household’s perceived control over one’s own life (Figure 16).

Comparing the relationships observed in June-July and October, it is interesting to notice that not only the signs remained the same, but in most of the cases the slope and shape remained similar – only in Malawi we observe a steeper slope, hence a stronger negative relationship, while in Nigeria we observe a more

10 Where those on Step 1, the lowest step, feel totally unable to change their life, while those on Step 9, the highest step, believe they have full control over their own life.

**Figure 16: Household perceived control over life and Food Insecurity Experience Scale - across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

flattened relationship, indicating a still negative but less strong relationship compared to June-July.

## 8. Conclusions

The Agricultural Policy Research in Africa (APRA) Programme of the Future Agricultures Consortium (FAC) has drawn on its extensive research network to continue its rapid assessments in order to understand changes in how the COVID-19 crisis continues to affect food systems and livelihoods in eight countries in Africa – Ethiopia, Ghana, Kenya, Malawi, Nigeria, Tanzania, Zambia and Zimbabwe. This report presents the results from the second round of what has been designed to be a three-round, multi-country, comparative analysis. The third-round survey and key informant interviews are planned for the beginning of 2021, which will be reported in country-level working papers and a synthesis report.

While it is still fairly premature to describe changes over time, we point to a second set of findings which indicate that while there are specific changes, the COVID-19 pandemic continues to have an adverse impact on certain aspects of some rural people’s ability to continue to manage their farming and marketing operations and maintain their well-being in our study communities. However, these effects are mixed, with some respondents in our sample households experiencing more negative impacts than others. Indeed, some

households have been remarkably resilient in their ability to respond to the shock of COVID-19. In many respects, these households have been coping extremely well under the circumstances, both with and more often without external assistance. One concern is how a prolonged COVID crisis could undermine those coping mechanisms over the longer term.

Nevertheless, the majority of households in most of the APRA sample communities experienced significant hardship, from restrictions on movement to greater childcare and housework responsibilities (particularly for women and girls) and greater farm work (for boys), and from reduced participation in farming and business activities to declining availability and rising cost of transportation. Many respondents also noted COVID-19’s negative effects on a reduction in their perceived control over their own lives. Food availability and consumption patterns were also adversely affected, with some respondents in several countries reporting worrying levels of food and nutrition insecurity.

Although only a second ‘snapshot’ of changing conditions, these results indicate that it will be important to continue to track these households and communities over time to assess how the COVID-19 pandemic has further effects in different parts of Sub-Saharan Africa and to analyse how local people, governments and food systems are responding.

11 The sum of the shares may not add up to 100% due to a limited number of respondents replying “Not Applicable” to the question.

## References

- De Brauw, A., Hirvonen, K. and Abate, G.T. (2020). Food and Nutrition Security in Addis Ababa, Ethiopia during COVID-19 Pandemic: July 2020 Report (Vol. 148). Washington, DC: International Food Policy Research Institute.
- Anthem, P., (2020) Risk of Hunger Pandemic as Coronavirus Set to Almost Double Acute Hunger by End of 2020. World Food Programme Insight (16 April 2020). Rome: World Food Programme. <https://insight.wfp.org/covid-19-will-almost-double-people-in-acute-hunger-by-end-of-2020-59df0c4a8072>.
- Addis, D., Alemu, D., Assaye, A., Tadesse, T., Tesfaye, A. and Thompson, J. (2018) Historical Analysis of Rice Commercialisation in Ethiopia : The Case of the Fogera Plain. *APRA Working Paper 18*. Brighton: Future Agricultures Consortium.
- Carreras, M.; Saha, A. and Thompson, J. (2020) Rapid Assessment of the Impact of COVID-19 on Food Systems and Rural Livelihoods in Sub-Saharan Africa. APRA COVID-19 Synthesis Report 1, Brighton: Future Agricultures Consortium
- Dzanku, F.M., Asante, K.T., Quarmin, W. and Hodey, L.S. (2020) Smallholder Farmers' Choice of Oil Palm Commercialisation Model and Household Welfare in South-Western Ghana. *APRA Working Paper* (forthcoming). Brighton: Future Agricultures Consortium.
- FAO, IFAD, UNICEF, WFP and WHO (2020). The State of Food Security and Nutrition in the World 2020: Transforming Food Systems for Affordable Healthy Diets. Rome: UN Food and Agriculture Organization.
- FAO-WFP. (2020). *FAO-WFP Early Warning Analysis of Acute Food Insecurity Hotspots (October 2020)*. Rome: UN Food and Agriculture Organization and World Food Programme.
- FSIN (2020). *2020 Global Report on Food Crises: Joint Analysis for Better Decisions. Food Security Information Network (FSIN)*. Rome: World Food Programme.
- GHI (2020). *2020 Global Hunger Index (GHI)*. Bonn and Dublin: Welt Hunger Hilfe and Concern Worldwide.
- Isinika, A., Mlay, G., Boniface, G., Mdoe, N., Poulton, C. and Saha, A. (2020). Does Rice Commercialisation Impact on Livelihood? Experience from Mngeta in Kilombero District, Tanzania. *APRA Working Paper 30*. Brighton: Future Agricultures Consortium.
- Matenga, C. and Hichaambwa, M. (2017) Impacts of Land and Agricultural Commercialisation on Local Livelihoods in Zambia: Evidence from Three Models. *The Journal of Peasant Studies* 44 (3): 574-593.
- Matita, M., Chinsinga, B., Mgalamadzi, L., Mazalale, J., Chimombo, M., Kaiyatsa, S. and Chirwa, E. (2018). A Longitudinal Tracker Study on Groundnut Commercialisation and Livelihood Trajectories in Malawi, *APRA Research Note 1*. Brighton: Future Agricultures Consortium.
- Muyanga, M., Aromolaran, A., Jayne, T., Liverpool-Tasie, S., Awokuse, T. and Adelaja, A. (2019). Changing Farm Structure and Agricultural Commercialisation in Nigeria. *APRA Working Paper 26*. Brighton: Future Agricultures Consortium.
- Ravallion, M. (2012). Poor, or Just Feeling Poor? On Using Subjective Data in Measuring Poverty. *Policy Research Working Paper 5968*. Washington, DC: World Bank.
- Schmidhuber, J. (2020). COVID-19: From a Global Health Crisis to a Global Food Crisis? Food and Agriculture Organization of the United Nations.
- Reardon, T.; Bellemare, Marc F.; and Zilberman, D. (2020). How COVID-19 may disrupt food supply chains in developing countries. In COVID-19 and global food security, eds. Johan Swinnen and John McDermott. Part Five: Supply chains, Chapter 17, Pp. 78-80. Washington, DC: International Food Policy Research Institute (IFPRI). [https://doi.org/10.2499/p15738coll2.133762\\_17](https://doi.org/10.2499/p15738coll2.133762_17)
- Tozooneyi, T., Chirwa, E.W., Mutyasira, V. and Sukume, C. (2020) Intra-Household Gender Differentials in Smallholder Agriculture Productivity in Food and Non-Food Crop Commercialisation Pathways: Evidence from Zimbabwe. *APRA Working Paper 32*. Brighton: Future Agricultures Consortium.
- WFP. (2020). COVID-19 Level 3 Emergency: External Situation Report #16 (12 November 2020). Rome: World Food Programme.

## Appendices

### Appendix A: Sampling

The sampling frames for the phone surveys in study locations in the eight countries were based on prior surveys with the same households. In Round 1 of this study, we followed a multi-stage sampling approach. First, a purposive selection was done for five communities in each country out of the areas in earlier survey round, based on the COVID-19 situation to enable targeting of sites that were more or less likely to be affected, using secondary real-time information; and, in this round, the same was done for Zambia. Second, stratification of households in each community was done based on the existing proportion of male and female headed

households. Finally, 20 households were randomly selected for interviewing from each community. About 5-10 replacement household randomly drawn helped minimise the risk of attrition. In total, 846 households were interviewed in October 2020.

**Table A1** below reports the number of interviewed households and the main characteristics of the respondents in October 2020. We interviewed a minimum of 96 respondents (Kenya) up to a maximum of 115 respondents (Zambia); respondents are, on average, 48.1 years old with the highest average age of the respondents in Ghana (53) and the lowest in Zambia (41). In almost all cases we interviewed the head of the household and we interviewed, on average, 24.8% women headed households.

**Table A1: Basic characteristics, October 2020**

Country	Communities	Reason for selection	N	Age	% Female Headed
Ethiopia	Kohar Abo; Kohar Michael; Kideest Hana; Bura; Jigena	Importance of rice production, accessibility to mobile network and all-weather roads	106	48.9	21.7
Ghana	Hotopo; Akatanchie; Ahountemo; Trebuom; Adum-Dominase	Oil palm processing activities, reliable network connectivity and representation of female household heads	107	53.0	16.8
Kenya	Kiambu; Kilifi; Kwale; Muranga; Nakuru	Proximity to Nairobi and Mombasa metropolis where the restrictions are likely to affect residents	96	52.5	33.3
Malawi	Mawwere; Zulu; Chikho; Chiloko; Nthondo	Proximity to trading centres	111	41.4	23.4
Nigeria	Owode Ward; Imeko Ward; Owu Ward; Rido Ward; Gami Gira Ward	Cases of COVID-19 as of May 2020	109	48.6	33.9
Tanzania	Mkusi; Chita; Njage; Maku-tano; Mchombe	Rice production and processing activities, accessibility by mobile phone and reported COVID-19 cases	100	47.2	42
Zambia	Lilanda; Luanga; Masansa; Nshinso	High intensity of agricultural commercialization activities both within and outside the Mkushi Farm Block area.	115	41.1	11.3
Zimbabwe	Stockbury; Lucknow Estate; Chipanza; Falling Waters; Glengrey	Proximity to markets, number of small-holder farmers and extension officers	102	53.5	18.6
<b>All</b>			<b>846</b>	<b>48.1</b>	<b>24.8</b>

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

## Appendix B: Detailed tables

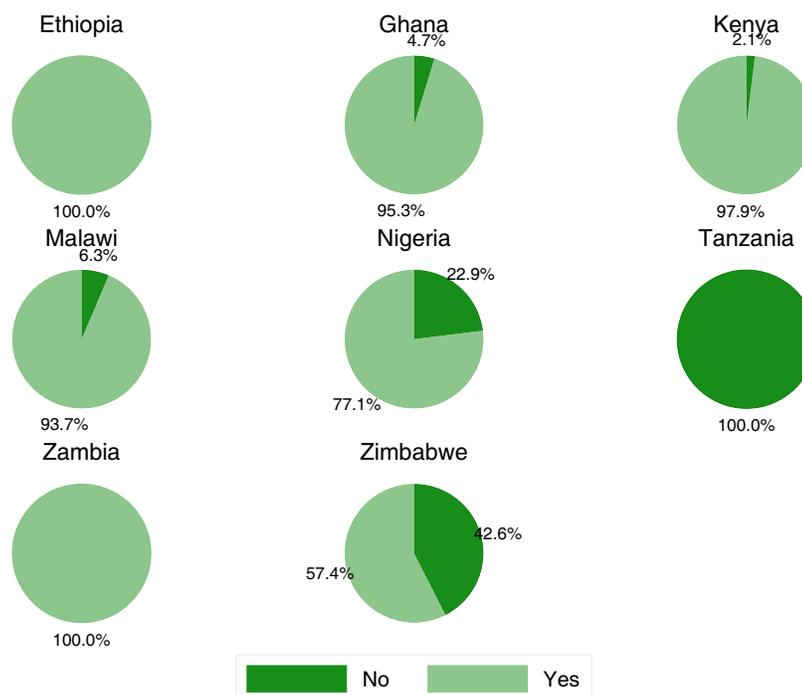
**Table A2: Reduction of movements in study areas since June-July – across countries (%)**

	As a result of COVID-19 have you reduced your movements within the village?	As a result of COVID-19 have you reduced your movements outside your village?	Have family members/ relatives/friends who live outside of the village been prevented from visiting due to COVID-19 restrictions?	Since June-July, how has the number of buyers or traders coming to the village to do business changed (compared to other similar times in other years)? <sup>11</sup>		
				<	=	>
Ethiopia	37.7	55.7	17.0	14.2	63.2	0.9
Ghana	40.2	45.8	15.9	27.1	29.9	43.0
Kenya	76.0	75.0	28.1	66.7	25.0	8.3
Malawi	49.5	49.5	43.2	63.1	22.5	12.6
Nigeria	37.6	52.3	41.3	67.9	4.6	27.5
Tanzania	7.0	6.0	1.0	77.0	19.0	2.0
Zambia	92.2	95.7	85.2	83.5	12.2	4.3
Zimbabwe	40.2	43.1	54.9	70.6	24.5	4.9
<b>All Countries</b>	<b>48.0</b>	<b>53.4</b>	<b>36.6</b>	<b>58.7</b>	<b>24.9</b>	<b>13.1</b>

Note: <Decreased; =No change; >Increased.

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Figure A1: Schools open since June-July – across countries**



Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

**Table A3: Reported change in selling habits since June-July - by sales modalities and across countries (%)**

How has your ability to sell your produce changed as an effect of COVID-19?																				
Country	At the farm gate (from your own farm)				In local markets				In district or regional markets				In national markets				Across the border			
	<	=	>	NA	<	=	>	NA	<	=	>	NA	<	=	>	<	=	>		
Ethiopia	9	59	0	32	6	84	8	3	5	78	8	9	0	2	0	98	0	0	1	99
Ghana	47	16	20	18	39	25	22	14	31	18	12	39	6	16	2	77	2	7	0	92
Kenya	44	23	5	28	44	13	4	40	43	1	2	54	32	0	3	65	25	0	2	73
Malawi	25	16	5	54	26	13	3	59	8	5	1	87	3	0	2	96	1	0	0	99
Nigeria	54	13	31	2	60	13	24	4	35	10	17	38	7	4	5	84	3	1	0	96
Tanzania	70	20	4	6	60	19	4	17	28	18	6	48	24	1	2	73	12	0	0	88
Zambia	76	8	14	3	77	10	9	4	77	10	7	6	59	10	21	10	27	4	2	67
Zimbabwe	36	24	40	0	34	14	52	0	26	15	54	6	8	16	24	53	0	0	0	100
<b>All Countries</b>	<b>45</b>	<b>22</b>	<b>15</b>	<b>18</b>	<b>44</b>	<b>24</b>	<b>16</b>	<b>17</b>	<b>32</b>	<b>19</b>	<b>13</b>	<b>36</b>	<b>18</b>	<b>6</b>	<b>7</b>	<b>69</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>89</b>

Note: <Decreased; =No change; >Increased.

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Table A4: Reported changes in transportation since June-July - across countries (%)

Country	Are you still able to hire transport to take your produce to the point of sale?		How has the cost of transportation of people and goods changed as an effect of COVID-19?			What effect has COVID-19 had on buyers or brokers coming to the area to purchase produce directly from you and other farmers?				
	No	Yes	NA	<	=	>	<	=	>	NA
Ethiopia	7.5	91.5	0.9	29.2	8.5	62.3	12.3	73.6	0.0	14.2
Ghana	18.7	79.4	1.9	0.9	31.8	67.3	48.6	30.8	20.6	0.0
Kenya	30.2	28.1	41.7	13.5	29.2	57.3	62.5	18.8	16.7	2.1
Malawi	24.3	15.3	60.4	9.9	30.6	59.5	55.0	18.0	13.5	13.5
Nigeria	3.7	90.8	5.5	1.8	4.6	93.6	60.6	6.4	32.1	0.9
Tanzania	20.0	60.0	20.0	3.0	87.0	10.0	82.0	17.0	0.0	1.0
Zambia	44.3	55.7	0.0	0.9	3.5	95.7	86.1	7.8	6.1	0.0
Zimbabwe	2.0	96.1	2.0	8.8	56.9	34.3	74.5	16.7	8.8	0.0
<b>All Countries</b>	<b>19.0</b>	<b>64.7</b>	<b>16.3</b>	<b>8.4</b>	<b>30.6</b>	<b>61.0</b>	<b>60.2</b>	<b>23.5</b>	<b>12.3</b>	<b>4.0</b>

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Table A5: Prices of services for agricultural production and contractual agreements since June-July (%)

Country	Since June-July, how have prices changed?																				
	Agricultural land rental price					Farm input prices					Price for tillage services					Contractual arrangements for your main cash crop(s) (received support)					
	<	=	>	NA	<	>	=	<	>	NA	<	=	>	NA	<	=	>	<	=	>	NA
Ethiopia	11.3	19.8	65.1	3.8	0.9	23.6	73.6	1.9	NA	0.9	19.8	33.0	46.2	0.0	2.8	0.0	0.0	0.0	2.8	0.9	96.2
Ghana	1.9	61.7	35.5	0.9	0.9	34.6	62.6	1.9	0.0	0.0	0.0	0.9	99.1	6.5	77.6	10.3	5.6	6.5	77.6	10.3	5.6
Kenya	6.3	53.1	32.3	8.3	6.3	45.8	47.9	0.0	0.0	4.2	38.5	27.1	30.2	24.0	18.8	0.0	57.3	24.0	18.8	0.0	57.3
Malawi	11.7	23.4	52.3	12.6	3.6	33.3	55.9	7.2	0.0	0.0	6.3	6.3	87.4	13.5	0.9	0.9	81.1	13.5	0.9	4.5	81.1
Nigeria	6.4	35.8	55.0	2.8	0.9	5.5	91.7	1.8	5.5	5.5	6.4	49.5	38.5	16.5	3.7	3.7	78.0	16.5	3.7	1.8	78.0
Tanzania	21.0	61.0	16.0	2.0	3.0	69.0	24.0	4.0	15.0	15.0	77.0	7.0	1.0	0.0	16.0	0.0	84.0	0.0	16.0	0.0	84.0
Zambia	7.8	14.8	70.4	7.0	1.7	8.7	89.6	0.0	0.0	0.0	10.4	84.3	5.2	35.7	21.7	8.7	33.9	35.7	21.7	8.7	33.9
Zimbabwe	1.0	71.6	23.5	3.9	3.9	18.6	77.5	0.0	0.0	0.0	38.2	61.8	0.0	8.8	68.6	15.7	6.9	8.8	68.6	15.7	6.9
All Countries	8.4	41.8	44.6	5.2	2.6	29.2	66.1	2.1	3.1	23.6	34.3	39.0	13.4	26.0	5.3	55.3	55.3	13.4	26.0	5.3	55.3

Note: <Decreased; =No change; >Increased.

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Table A6: Availability and prices of food items since June-July

	Ethiopia			Ghana			Kenya			Malawi			Nigeria							
	%	%	%	%	%	%	%	%	%	%	%	%	%	%						
	<	=	>	NA	<	=	>	NA	<	=	>	<	=	>						
AVAILABILITY																				
Grains	42.5	50.9	5.7	0.9	20.6	43.9	35.5	0	24	49	27.1	0	47.7	45.9	4.5	1.8	25.7	28.4	45.9	0
White roots, tubers, plantains	22.6	58.5	9.4	9.4	32.7	43	24.3	0	47.9	25	26	1	32.4	57.7	9	0.9	29.4	21.1	49.5	0
Pulses, nuts, seeds	46.2	45.3	4.7	3.8	2.8	72.9	24.3	0	54.2	31.3	14.6	0	44.1	51.4	2.7	1.8	22	41.3	35.8	0.9
Milk, milk products	39.6	46.2	9.4	4.7	0	69.2	29.9	0.9	28.1	54.2	16.7	1	24.3	61.3	1.8	12.6	20.2	43.1	35.8	0.9
Meat and poultry	7.5	84.9	2.8	4.7	3.7	65.4	30.8	0	18.8	55.2	22.9	3.1	18.9	69.4	7.2	4.5	19.3	33.9	45	1.8
Fish and seafood	24.5	22.6	10.4	42.5	13.1	42.1	43.9	0.9	27.1	29.2	16.7	27.1	20.7	61.3	16.2	1.8	20.2	45.9	32.1	1.8
Eggs	2.8	94.3	2.8	0	1.9	78.5	19.6	0	24	52.1	19.8	4.2	7.2	86.5	5.4	0.9	20.2	33.9	45	0.9
Dark green leafy vegetables	50.9	39.6	7.5	1.9	17.8	56.1	26.2	0	25	30.2	43.8	1	12.6	51.4	34.2	1.8	11.9	30.3	49.5	8.3
Other vegetables	49.1	39.6	11.3	0	23.4	50.5	26.2	0	27.1	28.1	43.8	1	10.8	60.4	22.5	6.3	16.5	37.6	37.6	8.3
Other fruits	51.9	43.4	4.7	0	26.2	50.5	23.4	0	55.2	27.1	15.6	2.1	38.7	48.6	6.3	6.3	17.4	42.2	30.3	10.1
Processed Foods	17.9	67	4.7	10.4	0.9	72	26.2	0.9	17.7	62.5	19.8	0	9.9	86.5	0.9	2.7	13.8	34.9	37.6	13.8
PRICES																				
Grains	4.7	28.3	66	0.9	2.8	24.3	72	0.9	7.3	43.8	49	0	4.5	35.1	58.6	1.8	4.6	4.6	90.8	0
White roots, tubers, plantains	6.6	48.1	35.8	9.4	2.8	19.6	77.6	0	10.4	27.1	61.5	1	9.9	50.5	38.7	0.9	7.3	9.2	83.5	0
Pulses, nuts, seeds	4.7	23.6	67.9	3.8	0	72	28	0	5.2	32.3	62.5	0	0.9	47.7	50.5	0.9	7.3	26.6	64.2	1.8
Milk, milk products	5.7	29.2	59.4	5.7	0	41.1	58.9	0	5.2	58.3	36.5	0	1.8	63.1	25.2	9.9	2.8	12.8	83.5	0.9
Meat and poultry	9.4	37.7	48.1	4.7	0.9	27.1	72	0	4.2	61.5	30.2	4.2	3.6	51.4	41.4	3.6	3.7	11	84.4	0.9
Fish and seafood	1.9	31.1	23.6	43.4	7.5	28	64.5	0	2.1	30.2	40.6	27.1	1.8	58.6	38.7	0.9	3.7	13.8	79.8	2.8
Eggs	1.9	23.6	73.6	0.9	0.9	78.5	20.6	0	5.2	54.2	35.4	5.2	5.4	71.2	22.5	0.9	0.9	14.7	84.4	0
Dark green leafy vegetables	4.7	51.9	41.5	1.9	7.5	71	21.5	0	29.2	39.6	30.2	1	10.8	68.5	19.8	0.9	12.8	40.4	37.6	9.2
Other vegetables	2.8	46.2	50.9	0	2.8	51.4	45.8	0	27.1	36.5	35.4	1	7.2	63.1	23.4	6.3	12.8	40.4	37.6	9.2
Other fruits	0.9	34	65.1	0	0	48.6	51.4	0	9.4	26	62.5	2.1	3.6	49.5	38.7	8.1	12.8	32.1	45	10.1
Processed foods	0	19.8	67.9	12.3	1.9	62.6	35.5	0	3.1	72.9	22.9	1	0	69.4	27.9	2.7	6.4	19.3	60.6	13.8

Note: &lt;Decreased; =No change; &gt;Increased.

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Table A6 (Continued): Availability and prices of food items since June-July

	Tanzania			Zambia			Zimbabwe			All Countries						
	%	%	%	%	%	%	%	%	%	%	%					
	<	=	>	<	=	>	<	=	>	<	=	>				
AVAILABILITY																
Grains	11	48	41	0	42.6	31.3	26.1	0	8.8	69.6	20.6	1	28.4	45.5	25.7	0.5
White roots, tubers, plantains	16	53	31	0	47.8	37.4	10.4	4.3	60.8	26.5	12.7	0	36.2	40.4	21.4	2
Pulses, nuts, seeds	8	86	6	0	51.3	33.9	10.4	4.3	25.5	71.6	2.9	0	31.9	53.9	12.8	1.4
Milk, milk products	5	70	25	0	58.3	31.3	7	3.5	23.5	72.5	3.9	0	25.3	55.6	16.1	3.1
Meat and poultry	7	83	9	1	51.3	32.2	13.9	2.6	17.6	67.6	14.7	0	18.4	61	18.3	2.2
Fish and seafood	2	46	52	0	59.1	27	13.9	0	10.8	64.7	24.5	0	22.7	42.3	26	9
Eggs	3	92	4	1	54.8	31.3	13.9	0	8.8	83.3	7.8	0	15.7	68.6	14.9	0.8
Dark green leafy vegetables	5	77	18	0	34.8	40	25.2	0	11.8	43.1	45.1	0	21.4	45.9	31.1	1.7
Other vegetables	8	77	15	0	43.5	40	10.4	6.1	38.2	32.4	29.4	0	27.2	45.7	24.2	2.8
Other fruits	7	83	10	0	58.3	36.5	5.2	0	34.3	51	12.7	2	36.3	47.6	13.5	2.6
Processed Foods	0	96	3	1	42.6	41.7	13.9	1.7	0	85.3	13.7	1	13.2	67.7	15	4
PRICES																
Grains	50	42	8	0	8.7	8.7	82.6	0	20.6	43.1	35.3	1	12.5	28.1	58.7	0.6
White roots, tubers, plantains	31	62	7	0	6.1	12.2	77.4	4.3	10.8	25.5	63.7	0	10.4	31.4	56.1	2
Pulses, nuts, seeds	5	85	10	0	2.6	10.4	82.6	4.3	1	56.9	42.2	0	3.3	43.7	51.5	1.4
Milk, milk products	14	82	4	0	0.9	7	88.7	3.5	3.9	58.8	37.3	0	4.1	43.1	50.1	2.6
Meat and poultry	7	90	2	1	2.6	5.2	90.4	1.7	8.8	51	40.2	0	5	40.8	52.2	2
Fish and seafood	47	51	2	0	0	3.5	96.5	0	15.7	62.7	21.6	0	9.6	34.4	47	9
Eggs	0	99	1	0	0.9	8.7	90.4	0	2.9	68.6	28.4	0	2.2	51.4	45.5	0.8
Dark green leafy vegetables	9	89	2	0	5.2	19.1	75.7	0	28.4	48	23.5	0	13.1	53.1	32.2	1.7
Other vegetables	7	90	3	0	4.3	18.3	71.3	6.1	11.8	38.2	50	0	9.2	47.6	40.2	3
Other fruits	3	96	1	0	0.9	10.4	88.7	0	3.9	44.1	50	2	4.3	42.1	50.8	2.8
Processed foods	0	99	0	1	0.9	9.6	88.7	0.9	4.9	59.8	34.3	1	2.1	50.5	43.3	4.1

Note: &lt;Decreased; =No change; &gt;Increased.

Source: Own calculations from APRA COVID-19 Rapid Assessment Second Round.

Carreras, M.; Saha, A. and Thompson, J. (2020) Rapid Assessment of the Impact of COVID-19 on Food Systems and Rural Livelihoods in Sub-Saharan Africa. APRA COVID-19 Synthesis Report 2, Brighton: Future Agricultures Consortium

© APRA 2020

ISBN: 978-1-78118-752-4

DOI: [10.19088/APRA.2020.023](https://doi.org/10.19088/APRA.2020.023)



This is an Open Access report distributed under the terms of the Creative Commons Attribution Non Commercial No Derivatives 4.0 International licence (CC BY-NC-ND), which permits use and distribution in any medium, provided the original authors and source are credited, the work is not used for commercial purposes, and no modifications or adaptations are made.  
<https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>

If you use the work, we ask that you reference the APRA website ([www.future-agricultures.org/apra/](http://www.future-agricultures.org/apra/)) and send a copy of the work or a link to its use online to the following address for our archive: APRA, Future Agricultures Consortium, University of Sussex, Brighton BN1 9RE, UK ([apra@ids.ac.uk](mailto:apra@ids.ac.uk))

Agricultural Policy Research in Africa (APRA) is a programme of the Future Agricultures Consortium (FAC) which is generating new evidence and policy-relevant insights on more inclusive pathways to agricultural commercialisation in Sub-Saharan Africa. APRA is funded with UK aid from the UK Foreign, Commonwealth & Development Office (FCDO) and will run from 2016-2022.

The APRA Directorate is based at the Institute of Development Studies (IDS), UK ([www.ids.ac.uk](http://www.ids.ac.uk)), with regional hubs at the Centre for African Bio-Entrepreneurship (CABE), Kenya, the Institute for Poverty, Land and Agrarian Studies (PLAAS), South Africa, and the University of Ghana, Legon. It builds on more than a decade of research and policy engagement work by the Future Agricultures Consortium ([www.future-agricultures.org](http://www.future-agricultures.org)) and involves more than 100 researchers and communications professionals in Africa, UK, Sweden and USA

Funded by the UK Foreign, Commonwealth & Development Office



Foreign, Commonwealth  
& Development Office



This report is funded with UK aid from the UK government (Foreign, Commonwealth & Development Office – FCDO, formerly DFID). The opinions are the authors and do not necessarily reflect the views or policies of IDS or the UK government