COVID-19 Learning Brief

A Pathways Approach to Understanding the Impact of COVID-19 on Rural Households

INTRODUCTION

In April 2020, the Mastercard Foundation Rural and Agricultural Finance Learning Lab (RAF LL) and ISF Advisors launched a COVID-19 Emergency Briefing Series to look at how this crisis might affect different types of rural households and the cascading impact this could potentially have on markets, food security, and national security.

As with the COVID-19 Emergency Briefing series, this learning brief builds on the recent Pathways to Prosperity report by applying a pathways lens to better understand how the crisis is impacting different types of rural households that are pursuing diverse livelihood strategies and have varying levels of resilience to cope with shocks. Applying a pathways lens to this research is important because it allows us to gain a more nuanced view of how the crisis is affecting households in different pathways. This can then inform the design of tailored and pathway-specific interventions, instead of taking a one-size-fits-all approach.

This learning brief begins by examining how the immediate financial shock has affected Pathway 1, 2, 4 and 5 households (refer to the pathway profiles mentioned below). We then take a cross-cutting approach to explore how these households have coped and what types of support they will need to fully recover. While this research only covers the immediate five months after COVID-19 hit Kenya, it also points to possible longer-term impacts that must be explored in greater detail to determine how this systemic shock might reshape Pathways and the wider rural economy. Thus, the learning brief concludes with recommendations for funders, service providers and policy makers to enable them to understand and address both the short- and long-term consequences of the pandemic in rural areas.

The research for this learning brief was funded by RAF LL and Shell Foundation with support from FCDO and implemented in partnership with Dalberg Advisors, Dalberg Design and Dalberg Research. The brief builds on original human centered design research with 25 households in Eldoret and Makueni counties in late April and early May, and a quantitative survey with 1,225 respondents within households in 6 counties from late July to mid-August (Central, Eastern, Nairobi, Nyanza, Rift Valley, Western). We complement this original research with data and insights from other organizations including: 60_decibels, ISF Advisors, BFA Global, CGAP, FSD Kenya, International Labor Office, the Mastercard Foundation Fund for Rural Prosperity, Mercy Corps Agrfin Accelerate, Precision Agriculture for Development, and the World Bank.

INTRODUCTION

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While the COVID-19 Emergency Briefing Series aimed to anticipate the potential impacts of COVID-19, this learning brief examines actual impacts on rural households in Kenya using real stories and data from the field. The data was collected during the first five months of the crisis from mid-March to mid-August 2020.
**Timeline of COVID-19 crisis in Kenya**

<table>
<thead>
<tr>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 13</td>
<td>First case detected in Kenya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| March 15 | First set of restrictions announced by GoK, including:  
  - Restrictions on inbound travelers, and mandatory quarantine on arrival  
  - Work from home for all non-essential workers  
  - Restrictions on large social gatherings |
| March 20 | Closure of schools and higher learning institutions |
| March 22 | Bars are closed from March 22 to September 28. Restaurants remained open for take out only and re-opened for dine in meals on April 27. Hotels were allowed to stay open, but many closed until inter-county movement restrictions were lifted in mid July. |
| March 25 | National flights banned |
| March 25 | International flights banned |
| March 27 | National curfew (7pm - 5am)  
April 6-8 | In & out of Nairobi Metropolitan area and Mombasa county  
April 8 | In & out of Kilifi and Kwale counties  
April 22 | In & out of Mandera county  
May 13 | Mandatory testing for truckers leaving Port of Mombasa / entering Kenya via land crossings  
May 16 | Banning movement of people across Tanzania, Somalia & Uganda borders (cargo trucks testing Covid-19 negative exempt)  
July 23 | August 13 | Household surveys |
| National curfew (9pm - 4am) | National curfew (11pm - 4am) |
RURAL PATHWAYS MODEL & PATHWAY PROFILES

The rural pathways model moves us from a static understanding of rural households based on their characteristics at a particular moment, toward a more dynamic view, enabling a more in-depth understanding of how households might evolve over time and how their needs change as they move along different development trajectories. The model lays out seven different transition pathways that coalesce around four centers of gravity – broad categories of livelihoods that rural households may choose to engage with.

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In this learning brief, we focus on four priority pathways:

PATHWAY 1 - Developing a resilience buffer
Households in Pathway 1 farm for subsistence, earning about half of their income by selling surplus produce, which they supplement with income from micro-enterprises, labor, and/or remittances. These households are likely to live below the poverty line and are very vulnerable to external shocks.

PATHWAY 2 - Farm intensification
Households in Pathway 2 view farming as a business and generate most of their income from farming. These households have higher and more stable incomes than Pathway 1, and are focused on investing in their farm to increase productivity.

PATHWAY 4 - Transition to formal enterprise
Households in Pathway 4 operate small- to medium-sized agricultural businesses with relatively high and stable incomes. These households often have larger assets such as processing equipment and rely on hired labor to maintain their operations.

PATHWAY 5 - Transition to service provision
Households in Pathway 5 operate micro- and small-sized enterprises in retail, leisure, or rural services. These households are typically younger and generate almost all of their income from their enterprise, but often have limited savings and access to credit.
When the COVID-19 pandemic reached Kenya in mid-March, the national government moved quickly to contain the spread of the disease by restricting travel within Kenya and between Kenya and neighboring countries, closing schools and non-essential businesses, and implementing a curfew. These restrictions were successful at slowing virus transmission, making the public health crisis less severe than originally feared. However, the economic impact has been acute, particularly on tourism, hospitality, and transportation industries. This led to a drop in demand for many goods and services, and disruptions of supply chains led to shortages and, in some cases, higher prices for vital goods ranging from farm inputs to food products. While the agricultural sector has proven more resilient, rural households are nonetheless contending with lower prices, as well as the knock-on effects of broader economic volatility. With mounting job losses in urban areas, many urban dwellers also migrated back to their rural communities and turned to farming as a source of food and income. Elizabeth is just one of many farmers whose livelihoods strategies are made more vulnerable by the ongoing pandemic.

Across all four pathways we examined, rural households in Kenya have experienced a significant financial shock as a result of the COVID-19 pandemic. Rural households that rely on farming for at least part of their income (Pathways 1, 2, and 4) reported both lower demand and lower prices for their produce. At the same time, rural households across all pathways reported higher household expenditures. This could be because local shortages have led to higher prices or because more household members are now present, as family members have returned home from cities and children are out of school. Pre-pandemic, many households supplemented their on-farm income by providing seasonal labor on other farms. However, demand for this labor has dropped sharply. With the duration of this crisis still uncertain, many households - including agri-businesses in Pathway 4 - are seeking to keep as much cash on hand as possible and have put a freeze on hiring.

These overarching financial shocks have played out differently across the pathways, as described below.

FIGURE 2

How COVID-19 affects rural households

What has been the most significant effect of the coronavirus on your household? (% of households)

<table>
<thead>
<tr>
<th>Pathway 1: Developing a resilience buffer</th>
<th>Pathway 2: Farm intensification</th>
<th>Pathway 4: Transition to formal enterprise</th>
<th>Pathway 5: Transition to service provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>16%</td>
<td>19%</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>8%</td>
<td>7%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>8%</td>
<td>12%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>12%</td>
<td>8%</td>
<td>69%</td>
<td>77%</td>
</tr>
<tr>
<td>56%</td>
<td>53%</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>Restriction on movements</td>
<td>Higher expenses</td>
<td>Job loss</td>
</tr>
<tr>
<td></td>
<td>Lower revenue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

— Elizabeth, Kenyan farmer 1
PERCEIVED RISK OF COVID-19 TO FARMING AND BUSINESS ACTIVITIES

We asked all households to rank the top three factors that pose the most significant risks to their farming or business activities. Respondents selected from a provided list of 13 factors, including climate change and inconsistent weather; pests and diseases; market and price volatility; household-level shocks, such as health emergencies or land seizure; and COVID-19.

There was a clear difference in the way households in different pathways perceived COVID-19 compared to other key risk factors. More than 75% of respondents in Pathways 4 and 5 ranked the pandemic as their top risk. But in Pathways 1 and 2, the pandemic didn’t make the top three. Rather, more than 60% of Pathway 1 respondents identified pests and diseases, input prices, and weather-related events as their most critical risk factors, despite also acknowledging that COVID-19 has had a significant financial impact on their household, due to income loss. Similarly, 60% of Pathway 2 respondents cited weather-related events or pests as their primary concern. What could explain this contrast?

Timing could be a factor, both in terms of when the COVID-19 crisis began and when the survey was deployed. Initial government restrictions came into effect at a point in the agricultural cycle when most survey respondents had already purchased inputs and completed planting. Furthermore, it’s possible that at the time the survey was deployed, the full impact of the crisis on Pathway 1 and 2 farmers’ ability to harvest and sell their crops had not yet manifested. Conversely, for respondents in Pathways 4 and 5, the immediate impact of COVID-19 on their business income may have heavily influenced their ranking decisions.

Individuals tend to rank risks according to salience, or how eminent and important the risk is to them, rather than the probability of the risk happening. A risk can be salient because the individual has borne the cost of that risk before and is actively trying to avoid it. This would explain why—for households that derive a majority of their income from farming—risks that are cyclical, seasonal, or recurrent (as many weather or pest-related shocks tend to be) were ranked higher than COVID-19. Conversely, the risk to agricultural activities as a result of COVID-19 may not have been fully realized and is not considered likely to recur in the future.

FIGURE 3
How much is COVID-19 top of mind for rural households

What are the greatest challenges to your agricultural / business activities? (% of households ranking COVID-19 within top 3 risks)

<table>
<thead>
<tr>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 4</th>
<th>Pathway 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing a resilience buffer</td>
<td>Farm intensification</td>
<td>Transition to formal enterprise</td>
<td>Transition to service provision</td>
</tr>
<tr>
<td>22%</td>
<td>28%</td>
<td>77%</td>
<td>76%</td>
</tr>
</tbody>
</table>

OTHER TOP RISKS

- Pathway 1: 62%: Weather or pest, 61%: Access to inputs, 34%: Access to markets
- Pathway 2: 60%: Weather or pest, 53%: Access to inputs, 50%: Access to markets
- Pathway 4: 50%: Competition, 43%: Cost of doing business, 42%: Customer purchasing power
- Pathway 5: 42%: Financial constraints, 41%: Cost of doing business, 40%: Competition
Subsistence-level smallholder farmers have been hit particularly hard by the economic impacts of the COVID-19 crisis, given their low level of resilience to shocks. Ninety-two percent of households in this study reported a decrease in incomes, while nearly half report that their household is in a much worse financial situation than before the pandemic. While Pathway 1 households primarily farm for subsistence, they also supplement their incomes through a mixed livelihoods strategy: On average, half of their income comes from selling surplus crops and another 25% from providing labor. But when the COVID-19 crisis hit Kenya, many households increased consumption of their own farm produce at home, leaving less to sell on local markets. Among households that consider farming their most important source of income, 60% reported selling less and 62% said they sold at lower-than-usual prices.

This drop in farming income has been exacerbated by disruptions in the labor market, another source of livelihoods for subsistence farming households. As government restrictions went into effect, many farms and small businesses were forced to close or reduce hiring in order to protect their own cash flow. More than 70% of households that consider labor their most important income source report working fewer hours, while 50% report lower wages due to COVID-19.

Many Pathway 1 households also run micro or small enterprises to further supplement their farm income. Government restrictions and lower consumer spending

"We now can’t go to the market due to social distancing. It is also very hard to find occasional jobs since people are at home and most people don’t have money to hire labourers."

— George, Kenyan farmer

Impact of COVID-19, coping mechanisms and support needs

- 92% report decreased incomes, with 60% selling less farm surplus, and 62% selling at lower prices than usual
- Most risk for food insecurity: nearly 50% are consuming less food
- Female-headed households are particularly vulnerable to food insecurity: 68% report decreased food consumption
- 13% report borrowing money to cope, while a quarter report that they cannot do anything to cope
- Disproportionately likely to request food aid

Pathway 1 snapshot

Developing a resilience buffer

Pathway 1 households farm for subsistence, selling any surplus for about half their income and supplementing with income from micro-business, labor, and remittances. These households are likely to live below the poverty line and have limited savings and assets, which makes them very vulnerable to external shocks.

<table>
<thead>
<tr>
<th>Annual income (USD)</th>
<th>0.6k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other income</td>
<td></td>
</tr>
<tr>
<td>Labour income</td>
<td></td>
</tr>
<tr>
<td>Business income</td>
<td></td>
</tr>
<tr>
<td>Farm produce sales</td>
<td></td>
</tr>
</tbody>
</table>

34% Households getting income from farming only

44% Households with savings at bank or formal institution

22% Households having taken credit in the last three years
have impacted this income source as well—among the 10% of households that consider running an enterprise their most important income source, 77% report lower income due to COVID-19.

While only 10% of Pathway 1 households rely on remittances as a significant income source, for these households, it makes up over half their income. Naturally, remittance flows have been severely impacted by COVID-19, as family members living in urban areas or abroad face their own financial troubles and are unable to send money back home. The World Bank estimates that remittances have decreased more than 20% in Kenya over the last several months. Among affected households, nearly half have reported that remittances are the income source most disrupted by the pandemic; 77% report that remittances have been reduced by half or more.

**2 PATHWAY 2**

**Farm intensification**

Pathway 2 households have also experienced a significant financial shock due to COVID-19. Eighty-nine percent of Pathway 2 households surveyed for this brief reported that their incomes decreased in the first four months of the crisis and 39% report that their household is in a much worse financial situation as a result of the pandemic.

When the Kenyan government instituted wide-ranging restrictions on transportation, markets, and business operations, it tried to limit the impact on agricultural supply chains, which are vital to the country’s economy. Despite these efforts, however, 50% of Pathway 2 households reported selling less or receiving lower prices for their produce. As one respondent noted: “Our financial status has really gone down since most of our produce is sold at lower prices and customers have no money to spend.”

> Transport issues mean we are not able to take produce to market.
> — Rose, Kenyan farmer

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**FIGURE 5**

Pathway 2 snapshot

**Farm intensification**

Pathway 2 households see their farm as a business, progressively embracing riskier investments to increase their surplus. They seek to boost farm productivity and secure access to buyers and traders. These households have higher incomes and tend to have higher levels of savings and better access to credit.

<table>
<thead>
<tr>
<th>Annual income (USD)</th>
<th>47%</th>
<th>58%</th>
<th>36%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour income</td>
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<td></td>
<td></td>
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<tr>
<td>Business income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm produce sales</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact of COVID-19, coping mechanisms and support needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 89% report decreased incomes, with 50% selling less produce or at lower prices than usual</td>
</tr>
<tr>
<td>• Relatively less vulnerable to food insecurity, due to ability to rely on farm surplus</td>
</tr>
<tr>
<td>• 34% of households are consuming less food, the lowest percentage compared to other pathways</td>
</tr>
<tr>
<td>• 11% report borrowing money to cope, while almost a quarter report that they cannot do anything to cope</td>
</tr>
<tr>
<td>• Requests for support geared towards farm-level investments such as loans for inputs and lower fertiliser prices</td>
</tr>
</tbody>
</table>
However, Pathway 2 households in Kenya appear to be more resilient during this crisis compared to Pathways 1 and 5. Unlike subsistence farmers who supplement income through multiple livelihood strategies, commercializing households generate most of their income from farming — which, relatively speaking, has been less affected by government restrictions — and have larger and more productive farms that are able to produce higher yields and generate higher incomes. In general, their incomes are two to three times higher than those of subsistence households. Pathway 2 households are able to produce and sell higher-value crops on both local and regional markets, and have better access to support services, including inputs, credit, and training—all of which contribute to their overall resilience.

In some cases, commercializing farmers have benefited during the crisis. About 15% of Pathway 2 respondents reported higher prices or increased sales, particularly in medium value chains such as vegetables, fruits, meat, and dairy, as well as long value chains such as tea, coffee, and cashews. Pathway 2 households also benefited from their lesser reliance on off-farm income sources, such as micro and small enterprise, labor, and remittances—all of which have heavily impacted the incomes of subsistence farming households.

### PATHWAY 4
**Transition to formal enterprise**

Pathway 4 households that operate well-established agricultural SMEs have relatively high and stable incomes, and are better able to cope with the financial shock of COVID-19. However, like other pathways, these households have experienced a sharp decrease in their incomes, with 95% reporting that their incomes have declined and more than 50% reporting that their household is in a much worse financial situation than before the pandemic. More so than subsistence and commercializing farmers, these households identify COVID-19 as the greatest risk to their business. Around 75% say that their business income fell by half or more during the first four months of the crisis.

There are two primary drivers of this decreased income. First, reduced consumer demand for goods and services—

### FIGURE 6

**Pathway 4 snapshot**

**Transition to formal enterprise**

Pathway 4 households operate well-established agri-businesses or commercial farms with relatively high and stable incomes. They have higher levels of savings and good access to credit, and are able to invest in their businesses to expand to new products, services, and markets.

<table>
<thead>
<tr>
<th>Annual income (USD)</th>
<th>$2.8k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other income</td>
<td></td>
</tr>
<tr>
<td>Labour income</td>
<td></td>
</tr>
<tr>
<td>Business income</td>
<td></td>
</tr>
<tr>
<td>Farm produce sales</td>
<td></td>
</tr>
</tbody>
</table>

- **36%** Households getting income from business only
- **85%** Households with savings at bank or formal institution
- **41%** Households having taken credit in the last three years

### Impact of COVID-19, coping mechanisms and support needs

- Three quarters of respondents have seen business income fall by 50% or more
- ~40% report eating less during the first four months of pandemic
- 20% report borrowing money to cope, and 10% report reducing investments to cope, the highest figures across pathways
- Increase in time poverty due to school closures and unpaid care burden has reduced women’s ability to run their business
- 76% request financial support to invest in their business, such as loan facilities with flexible repayment terms or capital to acquire stock
A Pathways Approach to Understanding the Impact of COVID-19 on Rural Households

As one respondent put it: “Most of our customers don’t have money to spend to come and buy our product.” Second, shortages or increased prices for supplies, such as farm inputs or animal feed. One respondent noted that “Getting access to seeds and fertilizers is a problem due to financial strain.” A recent survey of agro-dealers by Precision Agriculture for Development found that half are paying a higher price for the same inputs they regularly purchase, and are having to charge farmers higher prices as a result.5

Pathway 5 households experienced the greatest economic impact during the first four months of the pandemic. These households depend on micro- and small enterprises, typically in retail, leisure, and rural services, for their livelihoods. But those enterprises are relatively new and informal, and often run by young people with limited access to savings and credit, and very few owning land that they could return to for farming. This makes households in

FIGURE 7

Pathway 5 snapshot

Transition to service provision

Pathway 5 households operate micro- and small enterprises in retail, leisure, or rural services. These households depend on their businesses for their livelihoods and have aspirations to grow and expand. Most of these businesses are informal and relatively young, and are often run by younger people who have limited access to savings and credit.

Impact of COVID-19, coping mechanisms and support needs

- 97% report decreased incomes, although severity of shock varies according to sector of enterprise activity
- Female-headed households highly vulnerable to food insecurity: 63% report decreased food consumption compared to 36% among male-headed households
- Reliance on savings is highest compared to other pathways: 39% report using savings to cope
- 9% report reducing business investments to cope
- 73% request financial support to invest in and grow their business

$1.4k

Annual income (USD)

Other income
Labour income
Business income
Farm produce sales

57%
Households getting income from business only

49%
Households with savings at bank or formal institution

30%
Households having taken credit in the last three years

Agricultural SMEs are a key source of employment and skill-building opportunities in their communities. The impact of COVID-19 on these businesses thus has cascading effects throughout rural economies. One out of three businesses surveyed reported that they are hiring less—a phenomenon that especially impacts young people, who are more likely to rely on rural employment (rather than farming) for their livelihoods.
Pathway 5 particularly vulnerable to shocks like COVID-19. In our survey, 97% of households reported decreased incomes and 44% said their household is in a much worse financial situation than before.

The severity of the financial shock for rural entrepreneurs depends, in part, on whether the government deemed them “essential,” which would allow them to continue to operate. Micro- and small enterprises that provide beauty or hospitality services, as well as some types of retail shops, were not deemed essential and thus were forced to close during the height of the government restrictions. Businesses that sold food, pharmaceuticals, or agriculture inputs were allowed to stay open but faced a decrease in consumer footfall and spending, and increased costs of stock due to higher transportation costs.

Women-run enterprises were also more likely to experience a severe financial shock—in part because a higher proportion of these enterprises are in sectors deemed “non-essential.” Since women entrepreneurs already face disproportionate barriers to business success—including, but not limited to, lower access to credit and training—a prolonged financial shock will likely force many of these businesses to close. A recent study by the World Bank found that women-run micro- and small enterprises in sub-Saharan Africa are nearly 10 percentage points more likely to close because of COVID-19 compared to male-run enterprises (43% vs. 34%, respectively).

I am not able to do my things as usual because there is no cash and I am not able to settle my debts because my business is not giving me income as usual.

– Alice, Kenyan business owner

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FIGURE 8

Financial shock on Pathway 5 households

<table>
<thead>
<tr>
<th>Households stating their financial situation has gotten worse since COVID-19, by type of business</th>
<th>Much worse</th>
<th>Slightly worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catering or hotel</td>
<td>50%</td>
<td>47%</td>
</tr>
<tr>
<td>Beauty or hair service</td>
<td>35%</td>
<td>62%</td>
</tr>
<tr>
<td>Retail shop</td>
<td>41%</td>
<td>51%</td>
</tr>
<tr>
<td>Mobile money agent</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Agro-dealer or agro-vet</td>
<td>50%</td>
<td>33%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>36%</td>
<td>45%</td>
</tr>
</tbody>
</table>

(\% of households)

Proportion of businesses run by female-headed households

- “Non-essentials”
- “Essentials”

Shell Foundation / RAF Learning Lab
2 - Household coping mechanisms and support needs

REDUCED FOOD CONSUMPTION

As rural households across the different pathways experienced financial shock during the first four months of the pandemic, they turned to various coping mechanisms. The most common response to lower incomes and higher food prices has been to consume less food, increasing the risk of food insecurity for vulnerable households.

With the lowest levels of income and resilience, Pathway 1 households are at most risk for food insecurity. Nearly 50% of these households are consuming less food because of the pandemic. These households were also more likely to ask for food aid compared to other pathways, with 15% asking for this type of support. Conversely, while nearly all commercializing smallholder households in Pathway 2 have faced rising food prices, most have been able to avoid food insecurity by relying on their larger and more productive farms for food.

Non-farming households in Pathways 4 and 5 are unable to rely on their own farms for food; thus, around 40% of these households reported eating less during the first four months of the pandemic. While Pathway 4 households are more resilient and can draw on savings to cope, Pathway 5 households have limited resources to draw on, leaving them more at risk.

Across the pathways, female-headed households are more vulnerable to food insecurity. This is especially pronounced in Pathways 1, 4, and 5, where female-headed households were nearly 75% more likely to report decreased food consumption compared to male-headed households. In particular, female-headed households in Pathways 1 and 5 have less overall resilience to shocks and thus face higher risks of food insecurity. A woman heading a subsistence farming household noted that other impacts compound this risk: “Children are at home, due to closure of schools. As a result, food expenses have gone up and I am unable to go far to look for work.”

Impact on household food consumption

Households reporting a decrease in food consumption since COVID-19

(% of households)

<table>
<thead>
<tr>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 4</th>
<th>Pathway 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing a resilience buffer</td>
<td>Farm intensification</td>
<td>Transition to formal enterprise</td>
<td>Transition to service provision</td>
</tr>
<tr>
<td>Female-headed households</td>
<td>68%</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td>Male-headed households</td>
<td>45%</td>
<td>30%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Average % of households consuming less food

<table>
<thead>
<tr>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 4</th>
<th>Pathway 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>49%</td>
<td>34%</td>
<td>39%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Average annual household income

<table>
<thead>
<tr>
<th>Pathway 1</th>
<th>Pathway 2</th>
<th>Pathway 4</th>
<th>Pathway 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.6k</td>
<td>$1.7k</td>
<td>$2.8k</td>
<td>$1.4k</td>
</tr>
</tbody>
</table>
RELIANCE ON SAVINGS AND CREDIT

In addition to consuming less food, many households coped during the first four months of the pandemic by drawing on their savings and/or borrowing money. Nearly one-third of households across all pathways reported utilizing their savings—but their ability to continue doing so depends on their overall income level and ability to save. While 85% of Pathway 4 households have savings accounts with formal institutions, the proportion of Pathway 1 and 5 households that do so is less than half.

A number of households also reported borrowing money specifically to cope with COVID-19: 20% of Pathway 4 households have done so, compared to 14% of Pathway 1 households and just over 11% of households in Pathways 2 and 5. It’s not clear from our research where these households are borrowing money from, but based on what we know about how they utilize financial services in general, we can assume that Pathway 4 households are more likely to borrow from formal financial institutions compared to other pathways. In general, while Pathway 4 households have experienced a significant financial shock, they are better able to cope because of higher incomes and access to financial services, which have enabled them to build up savings and assets over time. More than 40% of Pathway 4 households have previously borrowed money in the past three years—reinforcing how important financial inclusion is to overall rural household resilience. Connection to the formal financial system also increases the likelihood that households can access additional relief measures, such as temporary moratoriums placed on loan repayments by financial service providers or temporary tax relief provided by the government.

A number of households, especially those in Pathways 4 and 5, also reported that they have coped with the financial shock of the pandemic by decreasing their investments in their farms and businesses. As the crisis stretches on, this decreased investment could further reduce productivity and incomes in the medium- to long-term, with knock-on effects on rural economies.

FIGURE 10

Top coping mechanisms by pathway

As a way of coping with COVID-19, have you had to do any of the following you would not normally have to do?

(%) of households)

- Used savings: Pathway 1 (30%), Pathway 2 (33%), Pathway 4 (37%), Pathway 5 (39%)
- Borrowed money: Pathway 1 (14%), Pathway 2 (11%), Pathway 4 (20%), Pathway 5 (13%)
- Reduced investments: Pathway 1 (8%), Pathway 2 (6%), Pathway 4 (10%), Pathway 5 (9%)
- Couldn’t do anything: Pathway 1 (26%), Pathway 2 (23%), Pathway 4 (18%), Pathway 5 (13%)

REQUESTS FOR SUPPORT

Our research shows that most households across all pathways are looking for support that can enhance their productivity and protect their income sources. Sixty-four percent of all households prioritized financial support, with Pathways 4 and 5 being most likely to request financial support (76% and 73%, respectively) to invest in and grow their businesses. Among other things, Pathway 4 respondents requested “access to finance through loan facilities with flexible payment terms and low interest,” “capital to boost my business stock,” and “financial support for farm inputs and...to acquire livestock.”

Twelve percent of households requested farm inputs, particularly in Pathways 1 and 2 where households must continue investing in their farms in order to ensure future
A Pathways Approach to Understanding the Impact of COVID-19 on Rural Households

Shell Foundation / RAF Learning Lab

productivity once the crisis passes. As one respondent noted: “We would like to receive loans from the government at low interest rates so that we can invest in our farms and also lower fertilizer prices.” Another respondent suggested that “the government should teach us more farming techniques that are helpful since we still use traditional farming methods.”

Pathway 1 households were disproportionately likely to request food aid, which is unsurprising given their worsening food security. Responses indicate that they are expecting government stipends to cover the cost of food—one respondent noted that “We hope the government sends the monthly stipend they promised” while another said “When we receive stipend from the government, we would invest more in the farm.”

Finally, Pathway 4 and 5 businesses were more likely to request support in accessing reliable energy. Pathway 4 businesses are more likely to operate larger machinery for value-added processing of agricultural products, while Pathway 5 enterprises require energy to operate smaller assets—such as a refrigerator or television—for their business.

### UNDERSTANDING HIGH-RISK SEGMENTS WITHIN PATHWAYS

Across all pathways, there are sub-segments of households that are disproportionately vulnerable to the crisis because of a lack of coping mechanisms. About 25% of households in Pathways 1 and 2, and 18% of those in Pathway 5, reported that they could not do anything to cope with the financial shock of COVID-19.

Though all subsistence households live at or near the poverty line, across all four pathways households with lower socioeconomic status, female-headed households, and households that rely more on occasional jobs and remittances are more likely to report that their financial situation is much worse than before the pandemic. These households are also more likely to reduce food consumption in response to the financial shock.

**Female-headed households** across Pathways 1, 4, and 5 are also more likely to report lower incomes, increased expenses, and lower food consumption compared to male-headed households. As a result of school closures and job losses, women have increased unpaid care responsibilities in the home, increasing their time poverty and reducing their ability to run their farm or business. This is especially pronounced in Pathways 4 and 5 where dedicating time to running the business is a key success factor.

Similarly, young people are more vulnerable to financial shocks because they are more likely to rely on labor or small service businesses for their incomes. Given the informal nature of their businesses and low levels of savings and assets, young people in rural communities have few coping mechanisms to deal with the impacts of the pandemic.

### 3 - Cascading effects of COVID-19

While this brief focuses on the immediate impact of the crisis on rural households, there are worrying signs that the knock on effects of COVID-19 could reshape pathways and change the rural economies in which they exist.

### DECREASING FINANCIAL RESILIENCE ACROSS ALL PATHWAYS

While the Kenyan economy started to reopen in July and August, many rural households are still experiencing a prolonged financial shock. Lacking additional resources and coping mechanisms, the most vulnerable households may be pushed backward into extreme poverty. Data collected on a monthly basis since June 2020 by 60_decibels points toward a worrying depletion of the resources that help rural households absorb shocks. For example, households are increasingly relying on their savings, with 80% of farmers indicating in September that they’ve dipped into their savings, up from 67% in July. Conversely, fewer farmers are borrowing money to cope with lower incomes (40% in September, down from 47% in July). Perhaps most alarming is the jump in farmers resorting to pawning or selling assets—which this was at 19% in the August survey, by September it had increased to 38%.

As discussed above, Pathway 4 households and the more resilient households in Pathway 2 are better positioned to cope for a longer period of time than households in Pathways 1 and 5. Still, a prolonged crisis will increasingly force even these households to tap into their savings and/or credit, leaving them vulnerable to future shocks. Households in Pathways 1 and 5, as noted, will continue to face a high risk of food insecurity and a higher likelihood of transitioning backward into more extreme poverty.
**Worsening Gender Gap**

As a result of increased unpaid care responsibilities and school closures, women are being pushed out of the rural economy at an alarming rate. In Kenya, most school-aged children have been at home since March. Additionally, the disruption to jobs and labor opportunities have put more adults at home. The related household responsibilities are disproportionately falling on women’s shoulders, increasing their time poverty and decreasing their ability to invest time in their farms or businesses.

In Pathway 5, in particular, there will likely be more closures of women-led enterprises, which are concentrated in the hardest-hit beauty, retail, and hospitality sectors. This will have cascading impacts on household resilience, as women often pursue entrepreneurship to diversify their incomes and cover day-to-day expenses, such as food.

In general, the shift of more women out of the productive economy not only erases decades of advancement in women’s economic empowerment; it also has major implications for the ability of rural economies to effectively recover from the COVID-19 crisis.

**Declining Employment Opportunities, Especially for Youth**

Agriculture makes up more than 73% of employment in rural Kenya, and continues to be the leading path for rural youth across the continent, with more than two-thirds of young people employed in agriculture. Therefore, decreased hiring by agricultural SMEs (Pathway 4) and commercial farms (Pathway 2) could have a large impact on rural employment opportunities, especially for youth.

In our research, one-third of agricultural SMEs responded that they hired less labor due to COVID-19. If this trend is protracted, the lack of employment opportunities may lead more rural youth to migrate to urban areas, especially as cities begin to reopen. Financial Sector Deepening (FSD) Kenya’s research has shown that, while the situation has seemingly improved between mid-September and mid-October for households in Nairobi, rural households continue to struggle due to limited purchasing power, lack of capital, and few opportunities to earn off-farm income. Some youth may pursue a multi-pronged strategy where they move between rural and urban areas to generate sufficient livelihoods opportunities. Without attractive employment opportunities or the labor to fill them, rural economies will suffer—in turn, widening the rural-urban inequality gap, which could have long-term consequences for rural transformation.

**Erosion of Rural Service Provision**

Our data shows that rural livelihoods strategies are diverse across and within different pathways. The goals and challenges of rural households vary, and thus they require tailored products and services.

Traditionally, the complexity of serving farmers has discouraged private sector participation, with the exception of corporate social responsibility or sustainability initiatives from various value chain actors. Instead, most rural service provision has been led by governments, non-governmental organizations, microfinance institutions, and social enterprises. However, in the last ten years, the smallholder agricultural sector has seen an explosion of tech-driven innovations and more diverse service offerings. Kenya, in particular, has become a testing ground for many of these innovative, private sector-led business models.

Now, as revenue streams and capital markets have dried up in the face of COVID-19, many of these new service providers are facing a cash crunch. The longer this goes on, the more it will put these business models at risk—or force providers to pivot to serving more profitable customer segments. Thus, this crisis has the potential to erode years of progress in improving access to inputs, finance, services, and markets, resulting in long-term consequences for efforts at rural transformation.
The financial impacts of COVID-19 on rural households and the pandemic’s cross-cutting, cascading effects could ultimately result in a reshaping of Kenya’s rural transition pathways. While still premature, it would not be unreasonable to expect a redistribution of rural households across pathways and, therefore, a shift in the rural transformation trajectories that policy makers, funders and practitioners had envisioned.

Prior to COVID-19, and based on our data, the vast majority of rural households were expected to likely remain in their pathway over the next three to five years. A smaller but relatively significant portion of households were likely going to transition forward by growing farm productivity and/or produce sales in the case of Pathway 2 and some Pathway 1 households, by investing time and assets to grow their business in the case of Pathway 4 and 5, or by finding more lucrative livelihood strategies in rural labor or cities. A minority of households were likely going to transition backwards, due to personal and/or market and climate-related shocks.

However, with many households ill-prepared to absorb any shock at all, and in the absence of social protection schemes or the right market enablers in place, this pandemic could push a large number of rural households backwards along the transition pathways. Pathway 1 and 5 households that have lower levels of resilience and are often less financially included are at high risk of sliding back into deeper poverty. If Pathway 2 households are unable to continue investing in their farms, their growth might remain stagnant for years or they may slide back into Pathway 1. If Pathway 4 businesses continue to limit hiring, this could lead to fewer rural employment opportunities and a declining rural economy, pushing more young people, especially in Pathway 5, to migrate to urban areas. If these scenarios do play out, we could see significant demographic shifts within and between pathways, and a declining rural economy with radically different service and policy needs.

Applying a pathway lens to COVID-19 responses.
As discussed in this brief, the COVID-19 crisis is playing out differently across pathways. We need to apply a pathway lens to understand how COVID-19 is impacting different rural clients and leverage these insights to design and implement tailored and pathway-specific interventions. Pathway 4 households running agricultural SMEs may need access to innovative financial products and non-financial support that can help them adapt their operations and continue growing. Pathway 2 households that are operating small commercial farms and are less able to make farm investments might need more flexible financing options that help them access good quality inputs, as well as market linkage support to sell their produce at the right time and price. A pathway lens is particularly important to better target and support the most vulnerable rural households that face a high risk of food insecurity, malnutrition, and backward transition into extreme poverty. This includes Pathway 1 households, but also households with low income and socioeconomic status, households that rely on informal labor for large parts of their income, female-headed households, and young people.

Preventing the next “shecession.”
The COVID-19 crisis has shone a spotlight on how a combination of traditional gender norms and the undervaluing of unpaid work thwart women’s ability to fully participate in the economy, especially when hit with a shock. In reality, when women shoulder the majority of the unpaid care work generated by an economic crisis, it subsidizes the recovery by allowing others to re-enter the workforce or restart income-generating activities. Not only does this disrupt women’s transitions to more resilient pathways and more remunerative livelihoods, it also hampers overall economic recovery by shutting out half of the population. While it’s too late to reverse the exodus of women from the productive economy this time around, efforts to prevent the next “shecession” must begin now. A gender lens must be applied to all investments that aim to build more resilient rural economies. This must include targeted interventions that build rural women’s resilience to future shocks through better access to finance and markets, improved access to childcare, and interventions that aim to transform the traditional gender norms that entrench discrimination and exclusion.

Clarifying the mid- and long-term impact of COVID-19.
We need to deepen our understanding of the mid- and long-term impacts of this crisis on rural households and the cascading effects on markets and economies— as well as on the speed, shape, and drivers of the recovery. Is COVID-19 a one-time shock that rural households will recover from in the short term? Or are there long-term implications for agricultural production and food security,

4 - Call to action

While we recognize that tackling a crisis on the scale of COVID-19 is an extremely complex task, we believe there are a number of considerations that we should be accounting for as a sector to prevent leaving the rural poor behind. These include:
Based on the current evidence on the impact of COVID-19 on rural households and economies, we present several key hypotheses on how the cascading effects of this crisis might play out in the long-term that should be tested with future research.

**HYPOTHESIS 1:** Stagnation within a given pathway becomes more prevalent. Depleted of their savings, and amidst a slow economic recovery and tightening credit conditions, Pathways 2, 4 and 5 are unable to invest in their farms and businesses, slowing down growth, job creation and income generation. Similarly, with a shift from providers to serve more lucrative pathways and a declining rural ecosystem, Pathway 1 is unable to grow farm productivity or diversify income streams; relying more on subsistence farming for the medium and long term.

**HYPOTHESIS 2:** The most vulnerable households - particularly in Pathways 1 and 5 - are unable to cope with the financial impact of COVID-19, and transition backward into more extreme poverty.

**HYPOTHESIS 3:** Lateral movements to often more precarious rural labour, and migration to cities increase, as rural entrepreneurship slows down. This is especially prominent for Pathway 5 households who tend to be younger and more mobile, and who seek to improve their resilience through a mixed urban-rural livelihood strategy.

**HYPOTHESIS 4:** A significant portion of female-headed households, faced with increased unpaid household duties, time poverty and a credit crunch, are forced to close down their enterprises which ultimately weakens women’s participation in the rural economy and has knock-on effects for rural household resilience.

**HYPOTHESIS 5:** Across all pathways, the impact of the next market or climate shock is magnified, given their more precarious financial situation due to the erosion of existing coping mechanisms during this pandemic, particularly for Pathways 1 and 5.

**HYPOTHESIS 6:** A small number of households are able to cope relatively well, jump start their recovery and continue along their transition journeys. These households tend to be involved in longer value chains - often members of cooperatives or farmer groups and/or had access to savings and/or flexible finance options that allowed them to manage liquidity and continue with investments.

Connecting the “micro” with the “macro”.

The COVID-19 pandemic is reshaping the world. The real current and projected future impacts of the pandemic on different segments of the rural population have the potential to radically reshape transition pathways and the rural economy. Policy makers and donors need to connect this new reality of what is happening at the micro level with the macro level agenda of rural transformation. This means responding to the immediate crisis to support rural households yet also asking the harder questions of what the rural economy should look like to support national economic and social outcomes, and what the implications should be for both short and long-term resource allocation to address the persistent challenges faced by rural farmers and agricultural SMEs. Now is the time for a new vision for rural development and an inclusive food system which we believe should be firmly anchored in the real experiences of rural people.
Footnotes

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3 All quotes in this learning brief are attributed pseudonymously to ensure the privacy of individual respondents.
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7 60_decibels, 2020.
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About the Authors

**LEARNING LAB**
*Original Content*

The Learning Lab works to identify and share knowledge relevant to our learning agenda and our users, but also to create new knowledge through research and facilitated learning. Original content from the Learning Lab includes news about the Lab, analyses we’ve conducted, knowledge products we’ve created, and posts we’ve written about other relevant initiatives.

[www.raflearning.org/profile/learning-lab](http://www.raflearning.org/profile/learning-lab)

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Shell Foundation (SF) is a UK-registered charity, founded by Shell in 2000, that creates and scales business solutions to enhance access to energy and affordable transport. We exist to serve the low-income communities most affected by these issues. We provide patient support to social enterprises and institutions capable of delivering social change at scale across Africa and Asia via disruptive technologies or business models without long-term reliance on charitable support or subsidy.

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**We want to hear from you!**

The Learning Lab and Shell Foundation are fundraising to implement a new round of research with the same panel of pathway 1, 2, 4, and 5 respondents in March 2021 to better understand the long-term impacts of COVID-19 on these households and to test the hypothesis presented in this learning brief.

If you would like to get in touch or contribute to the forthcoming research, please reach out to:

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