

# Responding to the Impact of COVID-19 on Rural People and Food Systems

Working Document

10 May



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Note: This is a working document providing a rapid synthesis of emerging perspectives, reports and data on impacts of COVID-19 on rural poverty and food systems. It includes an annotated bibliography current as of 10/05/2020. Feedback and comments for updating welcome. The work has been supported by IFAD.

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# 1 Introduction

COVID-19 is the world's most extreme '[black swan](#)' – unpredictable and high impact<sup>1</sup> – event since the Second World War. How extreme the ultimate consequences will be is only gradually unfolding and still remains largely guesswork. However, week by week the situation is looking more and more serious. Now is the time to imagine what might unfold and how best to respond.

Without doubt the world's poorest people, whether living in high-, middle- or low-income countries will be the most vulnerable to the health impacts and the economic fallout. The rural poor in middle- and low-income countries will be particularly at risk due to the depth of their poverty, high population numbers, reduced remittances and the limited capacity of the state to respond.

Food is people's most critical need. Keeping food flowing to both rural and urban populations at affordable prices must be a key priority in responding to the crisis. The reduction or loss of incomes will have widespread impact on people's financial resources to purchase food. The livelihoods of many rural people are connected at least in part to the production, processing and distribution of food, and the food security urban people depends on the work of small-scale farmers, and rural workers. Rural poverty, urban food security and the functioning of food systems are intimately connected.

The seriousness of the situation and that poor people and poorer countries are particularly at risk has been fully acknowledged by G20 Leaders, the UN Secretary General, and the International Monetary Fund and the World Bank Group, along with numerous others.

In low-income countries 67% of the population still live in rural areas and in middle-income countries it is 47%. This is a rural population of 476 million in low-income countries and 2.7 billion in middle-income countries. There are 736 million people still living in extreme poverty (US\$ 1.90 or below) and most of these are in rural areas, and 26.4 % of the world population live on US\$ 3.20 or below and many of these are also in rural areas.<sup>2</sup> The implication is that there are vast numbers of people in rural areas who will be negatively and quite possibly disastrously affected by the health and economic impacts of COVID-19.<sup>3</sup>

At the very least the current crisis will lead to increased poverty levels in the short term and hamper longer-term poverty reduction ambitions. In the worst case there is the potential for a widespread humanitarian disaster. The Economist Intelligence Unit warns that this will be the most brutal recession in living memory that "could devastate poor countries".<sup>4</sup>

In the current circumstances it is critical to understand the likely health and economic impacts of the COVID-19 crises on poor rural people and food systems. This provides the basis for being able to map out response strategies given different possible scenarios for impact of the COVID-19 outbreak.

Following China, the impacts are now being experienced at scale in low- and middle-income countries.

Foresight and scenario analysis involve exploring how the future might unfold and asking 'what if' questions in the face of uncertainty. Now more than ever foresight thinking is needed, partly to prepare for how shorter-term impacts will unfold, but more importantly to explore what COVID-19 means for the future and how to ensure the vast investments that will be made to help recovery can contribute to a more equitable and sustainable. Inequity and unsustainable resources use and climate change impact disproportionately on poor rural people and small-scale farmers. COVID-19 needs to be a wake-up call for creating systems that are far more resilient to shocks such as the current pandemic.

This document combines existing analysis and evidence to provide a framework for assessing and responding to the situation, and a synthesis of the current situation and emerging recommendations and policy responses. It also includes an annotated bibliography and links to critical resources and documents.

<sup>1</sup> Or as [Snowden](#) describes a 'black elephant' as risks of a global pandemic have been an 'elephant in the room' for years.

<sup>2</sup> Data source: [World Bank Open Data](#)

<sup>3</sup> See [statement](#) from International Fund for Agricultural Development (IFAD)

<sup>4</sup> Economist Intelligence Unit, 26/3/2020 [The coronavirus could devastate poor countries](#)

## 2 A Cascading Crisis

The impact of COVID-19 on the rural poor and food systems needs to be understood as a cascading health, economic, livelihoods and food security crisis with short-, medium- and longer-term implications. At this stage the full consequences are only gradually being understood and will depend on the yet unknown length of the pandemic and the depth of the economic decline it causes. The immediate impact is the large-scale social distancing and lockdown measures being introduced by most countries. This has caused a massive economic slowdown as peoples' freedom to shop, work and travel has been curtailed. In response large numbers of people, particularly casual and low paid workers have lost the jobs and their income. The cash flow and profits of firms have dropped substantially putting many, and in particular small and medium sized enterprises, at risk of financial default. This has a spiralling negative impact on the economy with flow-on effects to the financial sector and the availability of credit.

At the same time as large numbers of the population become ill with the virus medical facilities are becoming overwhelmed and death rates are rapidly increasing. Widespread infection and illness then put essential services including food supply at risk, due to lack of workers and further social distancing efforts to contain the spread.

Poor and vulnerable groups across high, low- and middle-income countries are highly impacted in the short-term with loss or reduced income making it difficult or impossible to purchase food and medicine or to meet other living costs.

The pandemic has spread most dramatically initially in China, the US, Europe and Iran. With the exception of Iran, these are countries with substantial economic resources and medical facilities. However, they are struggling to cope. This portends disastrous consequences as the virus now takes hold in low- and middle-income countries with high density poor populations, who have dramatically less financial and medical resources.

### 2.1 Possible Scenarios

The full extent of the COVID-19 health crisis and its economic ramifications is highly uncertain. Economic commentators are discussing whether the world will experience a U or V shaped economic downturn and recovery, and if U shaped how deep and prolonged will be the bottom of the curve. The uncertainties mean that organisations need to have contingencies for a range of plausible scenarios<sup>5</sup>.

Scenarios are constructed from considering a combination of 'inevitable trends' and 'critical uncertainties'. Box 2 lists relevant trends and uncertainties related to COVID-19, and Figure 1 illustrates three scenarios based on the degree of health crisis and the degree of the economic downturn. Table 1 outlines key contributing factors to each of the scenarios and the likely consequences.

In all scenarios low-income countries and the rural poor will be particularly badly affected and highly dependent on external support measures to cope with the crisis and avoid hunger, malnutrition and exacerbated poverty and inequality.

#### Box 1: Emerging Health and Economic Impacts of COVID-19

##### Health

- As of 16/4 [WHO](#) reports 1.95 million reported cases and 126 thousand deaths.
- At this stage this are predominantly in Europe, North America, Western Pacific and Eastern Meditation
- The pandemic is yet to take serious hold in Africa and South Asia where poverty rates are highest, but there are sufficient cases in these regions for widespread infect to be just a matter of time
- [Imperial College London](#) estimates that in the absence of interventions, COVID-19 would have resulted in 7.0 billion infections and 40 million deaths globally this year

##### Economic

- The IMF [World Economic Outlook of April 2020](#) projects a fall of in global GDP growth for 2020 from pre COVID-19 of 2.5 percent to -3%.

<sup>5</sup> See scenario analysis and projection by [ING Bank](#) and [McKinsey](#)

As the crisis unfolds it will be necessary to create scenarios for the impact on rural people and their communities on a country by country basis with attention for ‘hot spot’ locations and most vulnerable groups. This will need to include extent of job and income losses, impacts on functioning of food production and distribution, the degree of food and nutrition in security and scale of response measures needed. Existing food security early warning systems include the WFP [Vulnerability Analysis and Mapping \(VAM\) - Market Monitor](#), and the [Famine Early Warning System Network \(FEWS Net\)](#). However, these systems have not been designed to cope with reporting a situation as widespread as the likely impact of COVID-19.

Currently, and given the substantial stimuli put in place by international financial institutions and national governments, the dominant prognosis is for a global economic recovery in 2021. However, this does not rule out a more catastrophic situation evolving.

**Box 2: Trends and uncertainties underpinning potential scenarios for COVID-19 impact**

**Inevitable trends**

- Large scale “lockdowns” across most countries lasting at least some months
- Unmanageable demands on health services
- Massive drop in economic activity
- Widespread unemployment

**Critical Uncertainties**

*Health*

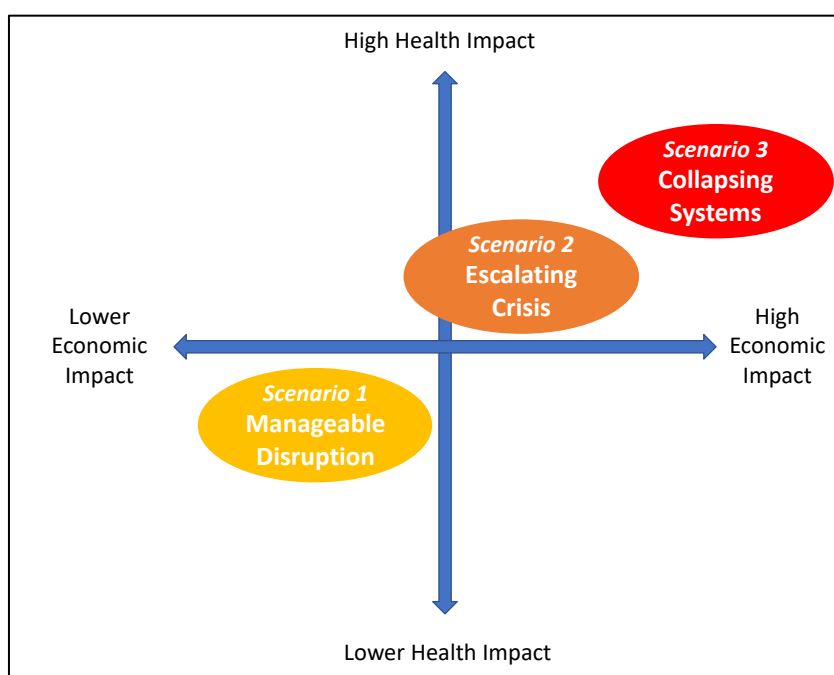
- Impact of “lockdowns” in containing the virus
- Death rate based on all those affected
- Rate and degree of “herd” immunity
- Extent to which infection rates increase as lockdowns are eased
- Extent to which warmer weather and hotter climates inhibit infection rates
- Extent to which infection rates increase in winter months
- Speed with which a vaccine is developed and widely distributed

*Economic*

- Period of time for which economic activity is severely constrained
- Ability of businesses and financial sector to cope with short-term drop in cash flow
- Size, nature and impact of government stimulus measures
- Degree to which some economic activity can continue during lockdown
- How quickly consumers spend and business invest once the pandemic is controlled
- Degree of trade restrictions
- How much credit markets tighten.

Figure 1 and Table 1 illustrate 3 scenarios based around the uncertainties of the level of health impact and the level of economic slowdown. Early on in the crisis many saw the situation as a ‘manageable disruption’, in part leading to a less vigorous response than in hindsight may have been appropriate. We are now clearly in a situation of ‘escalating crisis’ the degree to which a widespread ‘collapsing of

Figure 1: Three possible scenarios for COVID-19 impact





systems' can be avoided remains to be seen. Impacts and recovery will be very uneven with different countries, sectors, businesses and households experiencing the crisis in very different ways.

Table 1: Contributing factors and likely consequences for different scenarios

Scenario	Contributing Factors	Likely Consequence
Manageable Disruption	<ul style="list-style-type: none"> <li>• Social distancing and lockdowns lead to COVID-19 being controlled over some months</li> <li>• Speed with which testing and vaccine become available</li> <li>• Scale and effectiveness of economic stimulus measures</li> <li>• Scale and effectiveness of social protection measures</li> <li>• Capacity of businesses to sustain liquidity over short-term</li> <li>• Coordinated global response with significant support measures for highly affected low-income countries</li> </ul>	<ul style="list-style-type: none"> <li>• Infection rates moderate</li> <li>• Death rates in hundreds of thousands</li> <li>• Global growth falls to 1.5%</li> <li>• Unemployment rises by tens of millions</li> <li>• Relatively rapid economic recovery in high income countries enabling support for low-income countries</li> </ul>
Escalating Crisis	<ul style="list-style-type: none"> <li>• Infection and death rates prove to be difficult to control</li> <li>• Lifting of initial control measures leads to substantial levels of new infections</li> <li>• Substantial social distancing measure last for an extended periods of time</li> <li>• Trade restrictions are introduced, and food prices rise</li> <li>• COVID-19 infections substantially increase in northern hemisphere during autumn and winter</li> <li>• Governments are unable sustain economic support and stimulus needed over extended period to support social protection and business liquidity</li> </ul>	<ul style="list-style-type: none"> <li>• Infection rates high</li> <li>• Death rates in millions</li> <li>• Global growth becomes negative</li> <li>• Unemployment rises by over 100 million</li> <li>• Governments become more inward looking and acting for national rather than global good</li> <li>• Food insecurity becomes widespread</li> <li>• Emerging social unrest</li> <li>• Governments become more authoritarian in trying to control the situation</li> </ul>
Collapsing Systems	<ul style="list-style-type: none"> <li>• Large number of larger firms become insolvent</li> <li>• Global financial system is unable to sustain losses and banks begin to collapse</li> <li>• World loses internet reliability</li> <li>• COVID-19 becomes more virulent and/or deadly</li> <li>• Crisis is compounded by additional shocks (new disease outbreaks, extreme weather events)</li> <li>• Countries try to protect themselves through closing borders and trade and not contributing to global needs</li> </ul>	<ul style="list-style-type: none"> <li>• Global growth becomes deeply negative for extended period</li> <li>• Large permanent losses on stock markets</li> <li>• Run on banks</li> <li>• Extreme levels of unemployment in all countries</li> <li>• High levels of food insecurity and famine</li> <li>• Extreme social and political unrest and anarchy as government are unable to meet basic needs on large scale</li> </ul>

## 2.2 Regional Implications and Vulnerabilities

While all regions will be heavily impacted by COVID-19 in terms of poverty numbers and constraints on governments to respond Africa and South Asia will be particularly at risk.

Projections for Sub-Saharan Africa<sup>6</sup> by [McKinsey](#) consider scenarios for economic growth to drop to as low as -3.9% in a situation where the outbreak is not contained and to 0.4% in a more optimistic scenario. The World Bank's twice-yearly [economic update](#) for the region forecasts the first recession in the region for 25 years and with growth dropping to as low as -5.1%. This will cost the region up-to US\$ 79 billion in

<sup>6</sup> See Centre for Global Development, 3/4/2020, [The Economic Impact of COVID-19 in Africa: A Round-Up of This Week's Analysis](#), for a good overview

output losses in 2020. The update also notes the potential for a food security crisis in the region with agricultural production dropping by up to 7% and food import declining by up to 25%

The World Bank's April 12 [South Asia Economic Focus](#) anticipates a significant economic declines across the eight countries of the region. Growth is projected to fall to between 1.8 and 2.8 percent for 2020, the lowest for 40 years. If lockdown continue for a significant period in a worst-case situation growth could become negative. The report notes the significant impact on low-income people who are informal workers and have no healthcare or social safety nets and notes the large-scale migration of workers from cities back to rural areas. It notes the potential risk to food systems.

The drop in oil prices and other resources commodities has double impacts for countries who are resources exporters and food importers due to currency changes, exacerbating the difficulty for government to fund response mechanisms compounded by food prices increasing due to falling currency.

### 3 Overview of Impact on Rural Poverty and Food Systems

Seventy percent of the extreme poor and large proportions of those on less than US\$5.50 live in rural areas<sup>7</sup>. This group is highly vulnerable to the health and economic effects of COVID-19 and their wellbeing will be severely affected. It is not just the extreme poor who will be affected by this situation as reduced employment and income will affect many who are currently above the extreme poverty line.

There are strong rural urban linkages in the current situation. Many people who have migrated to urban areas are losing their jobs and significant numbers are returning to rural areas. This has compounding effect in rural areas as remittances fall and those who have lost jobs return to rural areas with no source of income.

Figure 2 maps out the key consequences and areas of impact for rural people's wellbeing. The immediate effects of COVID-19 on economic activity and jobs, due to social distancing and illness have consequences for wellbeing in five key areas: livelihoods and income, food and nutrition security, health and safety, education and resilience. Each of these have specific gender and age-related effects. The degree of vulnerability is heavily influenced by individual and household characteristics, and the geographic and political-economic context.

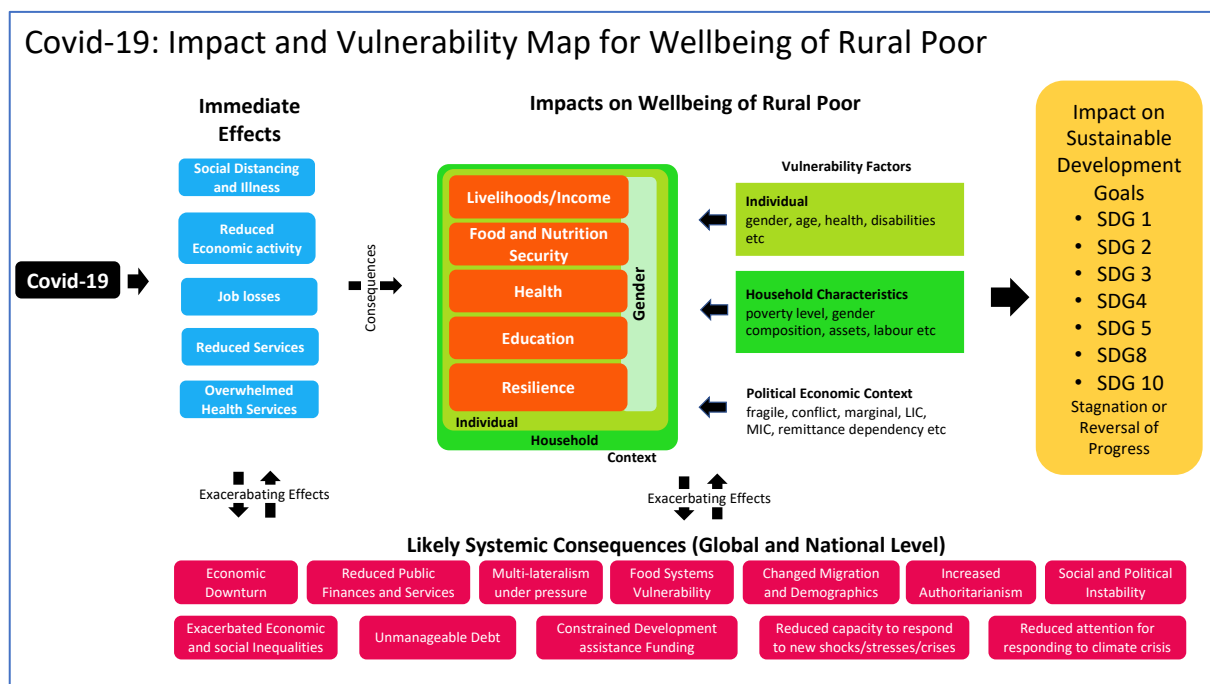
The scale of negative impacts on rural people overall will show up as stagnation or a backsliding in terms of progress towards the SDGs, particularly in relation to SDGs 1,2,3,4,5,8 and10.

As illustrated at the bottom of Figure 2, there are likely systemic consequences of the immediate effects of COVID-19, ranging from economic downturn, reduced public services and increased debt through to the risks social instability and violence, which in turn have exacerbating effects on the rural poor. As discussed above in relation to the scenarios, it is too early to understand the full scope and severity of these consequences, however it is not too early to consider consequences and mitigation measures. It is clear that the financial capacity to respond, globally and by individual nations, will be overburdened. In a worst-case scenario, there will simply not be the resources to meet rural people's needs, creating a vast humanitarian crisis with inevitable social and political unrest.

There is a profound interconnection between the wellbeing of rural households and food systems. First, the livelihoods for a vast majority of rural people still depend, at least in part, on agricultural production or jobs in the food and agriculture sector. Second, the most critical priority for households in times of crisis is access to food. This hinges on a combination of food continuing to be available, self-sufficient food production, income to purchase food, low and stable food prices, and where all else fails direct food aid. Consequently, disruptions to food systems will have severe compounding effects for rural people. Despite agricultural production, overall rural people are net purchasers of food, this means that reduced income from remittances and off-farm employment can severely affect their access to food

<sup>7</sup> See [Global Multidimensional poverty Index 2019 illuminating Inequalities](#)

Figure 2: Impact and Vulnerability Map



A critical issue to recognise is the medium- and longer-term risks of compounding crises, such as natural disasters, climatic extremes, pest outbreaks, other animal or human disease outbreaks, or political instability. There will be marginal if any capacity to deal with these on top of the COVID-19 crisis. For some areas the current crisis already comes on top of existing crises, such as drought in East and Southern Africa locusts in Ethiopia, Somalia and Kenya and swine fever in China.

Rural people are highly vulnerable to the impacts of climate change. There is a substantial risk that the COVID-19 response will divert attention and action away from climate change, compounding the negative consequences for rural people and food systems in the medium to longer-term.

The following sections unpack the impact on food systems and rural people in more detail. The analysis starts with impacts on food systems given how critical they are for rural people's wellbeing.

## 4 Food Systems Impacts

The sections below synthesise likely impacts on food systems identified by a range of institutions, researchers and commentators over recent weeks. These draw in particular on [FAO COVID-19 resources and policy briefs](#), [CGIAR and in Particular IFPRI resources and blogs](#), [CFS HLPE Statement](#), [IFAD Blogs](#), and the other resources provided in Appendices 1 and 3.

### 4.1 General situation

So far there have not been major disruptions of essential food supplies to consumers or widespread food price volatility. Global food stocks and reserves are at secure levels, and substantially higher than during the 2008/09 food price crisis, with good projected yields in many areas for the coming harvest. However, as the pandemic takes a wider toll, and escalates in LMICs, the risk of substantial disruption, with widespread impacts on food and nutrition security is significant, if adequate response measures are not put in place.

#### Box 3: Ministerial Statements on Food and Agriculture

- Joint Statement on COVID-19 Impacts on Food Security and Nutrition – [FAO/IFAD/WB/WFP](#)
- Declaration on food security & nutrition – [AU](#)
- ASEAN Ministers of Agriculture – [ASEAN](#)
- Ministers of Agriculture joint statement – [G20](#)



There are however a complex set interacting factors influencing food systems, that impact on food availability (food being produced and distributed), access (people being able to afford food and being able to physically obtain it). These factors include for example household income, the functioning of food supply chains, labour availability, access to inputs, access to credit, demand due to change consumption patterns, trade restriction and currency rates. These factors are playing differently for different households, value chains, geographies and countries. Currently there are no indications of significant and widespread food shortages (with the exception of those already living in food security hot spots). However, there are many emerging reports of disruptions to food supply chains indicating that food security can't be taken for granted as the crises unfolds.

In LMICs food supply and distribution is very dependent on small-scale producers and large numbers of micro- small- and medium-scale food processing, distribution and retailing enterprises operating in informal or semi-formal markets. This food production and distribution network is both vulnerable and resilient. Many individuals are highly vulnerable due to very limited financial assets, however the system as a whole has historically coped with numerous crises, albeit at the cost of many individuals earning very low or below poverty level incomes. This resilience can give some cause for hope in the current situation but should not be taken for granted. The tough reality for many poorer people and countries is that it will be very very difficult for extended large scale physical distancing while also protecting income and food supply. The risk and consequences of virus vs the risk and consequences of hunger will be the difficult choice.

Lessons from the 2008/09 food price and the Ebola crisis indicate the risks for rural communities, and that local impacts on the rural economy may not always play out in the way expected and that it is critical to closely monitor effects and provide targeted responses.<sup>8</sup>

At this stage the major risk to food and nutrition security is mostly people's lack of access to food because of reduced income, rather than a lack of availability. However, there are huge uncertainties about how domestic food supply chains will ultimately be affected.

## 4.2 Global Food Stocks and Food Prices

The most recent update from the [Agriculture and Market Information System](#) (AMIS) states:

Despite much uncertainty caused by the rapid spread of COVID-19, global food markets remain well balanced: cereal stocks are expected to reach their third highest level on record this season and export availabilities for all AMIS crops are more than adequate to meet the anticipated demand. Nonetheless, given prospects of much weaker economic growth in many countries and turmoil in energy and currency markets, as well as rising concerns over the impact of temporary lockdowns on both domestic logistics and international trade, the situation needs to be monitored closely.

For March, the [FAO Food Price Index](#) was down 4.3% from February, and dropped another 3.4% in April, driven largely by COVID-19 demand contractions. However, indications are emerging of increasing domestic prices in some places, particularly for animal and fresh products. There are currently a complex set of factors that vary from country to country, including marketing functioning, demand and exchange rates which are causing both increases and decreases in food prices.

Despite the immediate reassuring perspective of current global grain food stocks and prices, evidence is starting to emerge of impacts on domestic food prices. For example, Sleet (2020) notes that In China food prices increased by 21.9% in January and pork jumped by 135.2% putting food costs at 8 year high (the consequences of the swine fever in China not just COVID-19 need to be factored into these figures. Data from [Satista](#) shows that in South Korea, due to reduced export from China prices of red chillies have increased by 31%, carrots by 28% and spinach by 17%.

FAO has set up a [Big Data Tool](#) to monitor [food prices of non-stable food groups](#). Since February this shows average increases of up to 6.3%. IFPRI has also developed a [COVID-19 Food Price Monitor](#)

<sup>8</sup> See [interview](#) with Stephan Dercon on lessons from Ebola for private sector by IFC

[Dashboard](#) which monitors domestic markets based on daily price data. Based on a limited number of markets this is showing considerable variation between price drops and price increases with maize and beans increasing by more than 15% in some markets but many other products dropping in price. To date this is not indicating strong patterns of wide spread domestic price increases.

### 4.3 International Supply Chains and Trade

One fifth of all calories consumed globally are traded internationally. This is sufficient for there to be significant impacts on global and domestic food prices if trade is restricted. The impacts on countries will depend on whether they are import or export dependent and the types of food imported and exported.

A compounding effect for countries in times of crisis can be currency devaluation which increases the domestic prices of imported foods.

Significantly many low-income countries and those experiencing fragility or conflict are net food importers.

Besides the imposition of trade restrictions, the risks to international supply chains from COVID-19 are:

- Inability of exporting countries to maintain their internal production and distribution systems.
- Constraints to shipping due to avoiding outbreaks of COVID-19 across the maritime sector and vessels being restricted from entering ports<sup>9</sup>.
- Constraints to airfreight due to the substantial reduction of air traffic and COVID-19 impacts on flight operations<sup>10</sup>.

Air freight reductions will affect higher value and fresh food products mainly, which could will impact on producers of these products in LMICs.

The risks from trade restrictions on global food commodities are well recognised and G20 leaders and Agriculture Ministers have issued statements committing to avoid unnecessary trade restrictions that would affect global food prices (see Box 3)

### 4.4 Domestic Supply Chains

A widespread and prolonged outbreak of COVID-19 in LMICs with the associated economic decline does have the potential to seriously disrupt production and supply chains. Critical contributing factors are:

- ¼ of all agricultural work is done by migrant workers.
- The agriculture and food sector in LMIC is highly dependent on a large number of MSME who have limited financial capital and are highly vulnerable to disruptions in their cash flow.
- Much food is produced by small-scale farmers who will be highly vulnerable to the current health and economic impacts.
- Disruption to labour, logistics, government services and credit may reduce access to critical inputs including seed, fertilizer, and animal feed.
- Fresh food production and harvesting requires time critical skilled labour.

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<sup>9</sup> See [CNN report](#)

<sup>10</sup> Ibid

**Box 4: Emerging Field Realities**

- The reporting and anecdotes below provide early evidence of emerging impact on food systems. As the crisis evolves, more detail tracking, will be critical for the early identification and response to food supply chain blockages.

**America:** Meat packing plants have closed and cattle slaughters are down 14%<sup>11</sup>

**Kenya:** The Kenya Seed Company has suspended operations. Farmers are concerned shortages will lead to uncertified seeds being sold and reporting closure of input suppliers. Labourers report avoiding travelling for farm work.<sup>12</sup>

**India:** Chickpea prices in some areas have increased by 20% due to transport constraints, many labourers who do much of the heavy lifting for agricultural transport are no longer working, credit is tightening including through digital lenders, demand for chicken and eggs went down due to rumours of being vectors for COVID-19<sup>13</sup>.

**Ethiopia:** vegetable trade and consumption is declining, due to movement restrictions and concern over food safety, farm losses are increasing, shortage of farm inputs and increasing prices, labour becoming scarce<sup>14</sup>.

**Nigeria:** Closures of schools is causing reduction in egg demand<sup>15</sup>

**Thailand:** Exodus of migrant workers that will affect rice harvesting<sup>16</sup>

## 4.5 Implications for Small-Scale Agriculture

Small-scale farmers will be at a disproportionate risk for the following reasons:

- They have limited assets and savings to cope with disruptions to incomes.
- Many are older and will be at increased health risks from COVID-19.
- Small-scale farming households increasingly have diverse sources of income including labouring and remittances, these income streams will be at risk meaning they will have insufficient income to cover basic food and other needs and to invest in farming inputs.
- Small-scale farmers are highly dependent on MSME intermediaries for marketing and input supply and often credit, if this network of food system business is disrupted there will be significant flow on effects for small-scale farmers in terms of their input and offtake markets.
- On average small-scale farmers are net purchasers of food so any impact on food prices will also negatively impact on them, conversely increased food prices will not flow back to small-scale producers to any significant degree.
- Many small-scale farmers and agricultural workers are women who are disproportionately affected by the consequences of COVID-19.

## 4.6 Nutritional Impacts

The emerging situation has the potential to negatively impact on household nutrition in the following ways<sup>17</sup>:

- Lower nutritional quality staple foods and processed foods are cheaper and people under financial stress will resort to these.
- Lower nutritional quality staple foods and processed foods are easier to produce, distribute and store in times with logistical and labour constraints

<sup>11</sup> [Fears over supply of fresh meat supply](#)

<sup>12</sup> See Daily Nation, 26/3/2020 [COVID-19 fears cast shadow over food safety](#)

<sup>13</sup> See [India's Food System in the Time of COVID-19](#)

<sup>14</sup> IFPRI: [Impacts of the COVID-19 crisis on vegetable value chains in Ethiopia](#)

<sup>15</sup> The Guardian Nigeria: [Shortage of food looms over COVID-19 lockdown](#)

<sup>16</sup> [Food Navigator Asia](#)

<sup>17</sup> See: GAIN - [The COVID-19 Crisis and Food Systems: addressing threats, creating opportunities](#); GLOPAN - Covid-19, [Food Systems and Nutrition: Statement from our Co-Chairs](#)

- Fresh food, vegetable and proteins sources may experience disproportion prices increases due to production and distribution constraints.

An extended economic crisis for LMICs with significant increased levels of poverty has the potential to substantially negatively affect SDG nutrition targets .

## 4.7 Food System Resilience

There are already significant concerns about the resilience of the food systems to cope with increasing food demand, declining natural resources and the impacts of climate change. This is compounded by recognition that food systems are not delivering healthy diet for most people and the way the function exacerbates inequalities.

COVID-19 will place increased stress on food systems, reduce attention for improving their resilience and reduced savings and income will make many people more vulnerable to any future crises affecting the food system.

# 5 Poverty and Wellbeing Impacts

## 5.1 Impacts on Key Areas of Wellbeing

Table 3 lists the likely and possible impacts on the rural poor as a result of COVID-19 and its wider economic consequences. [Estimates by IFPRI](#) earlier on in the outbreak, assuming a short disruption to economic activity, global growth cut by 1% and containment measures being successful projected poverty rates and associated food insecurity would increase by 2% or 14 million. IFPRI noted that Sub-Saharan Africa would be most seriously affected. However, since then projections for declines in global GDP and economic growth have become much more dire. Subsequently, [IFPRI has provided updated figures](#) based on IMF projections on contractions in global GDP that project up to 140 million extra people becoming extremely poor with 80 million of these in Africa.

[Sumner, Hoy and Ortiz-Juarez](#) have assessed possible impact on poverty headcount at US\$1.90, US\$3.20 and US\$5.50 per day, for global economic contractions of 5, 10 and 20 percent. In the worst-case scenario of a 20% economic contraction the poverty headcount for under US\$5.50 increases by 420–580 million. This impact would be substantially felt in rural areas.

Table 3: Impacts on Rural People’s Wellbeing and Gender Issues

Wellbeing Dimension	Impacts	Indicative Gender Issues
Livelihoods and Income	<ul style="list-style-type: none"> <li>• Loss of income due to not being able to grow or sell agricultural produce</li> <li>• Loss of employment</li> <li>• Loss of remittances</li> <li>• Reduced ability to produce food for self-consumption</li> <li>• Illness or death of household income earners</li> <li>• Informal and day workers are particularly vulnerable</li> </ul>	<ul style="list-style-type: none"> <li>• Women and girls are more likely in poorly paid and precarious employment</li> <li>• Gender pay gap</li> <li>• Female labour migrants are frequently confined to low-skilled jobs in domestic and care work, hotel and catering services, the entertainment and sex industry, agriculture and assembly lines.</li> <li>• Compared to men, women send a higher proportion of their salary as remittances, and they mostly spend these on basic household needs.</li> <li>• At global level, female migrants send about same amount of remittances as male migrants. But research suggests that women tend to send a higher proportion of their income, even though they generally earn less than men. They also usually send money more regularly and for longer periods of time.</li> <li>• Travel restrictions cause financial challenges and uncertainty for mostly female foreign domestic workers.</li> </ul>

<p>Food and Nutrition Security</p>	<ul style="list-style-type: none"> <li>• Restricted movement reduces access to food</li> <li>• Reduced income reduces access to food</li> <li>• Increased food prices reduce access to food</li> <li>• Disruption to supply chains reduce food availability</li> <li>• People consume lower nutritional quality food due lower incomes, increased food costs and availability</li> <li>• Those currently with poor food and nutrition security have lower immunity and greater health risks from COVID-19</li> <li>• Reduced availability and access to nutritious food due to pandemic increases the numbers weaker immunity</li> <li>• School feeding programs disrupted compounding household food and nutrition security issues</li> </ul>	<ul style="list-style-type: none"> <li>• Women and girls do the bulk of unpaid and underpaid care work. As incomes drop and food options decrease, those with lower incomes will need to seek alternative cheaper food options thus increasing time poverty.</li> <li>• Women who eat less nutritional food than male hh members will become even more vulnerable.</li> </ul>
<p>Health and Safety</p>	<ul style="list-style-type: none"> <li>• Difficulty of effective social distancing may lead to high and rapid levels of infection</li> <li>• Limited availability of protective equipment and hand washing facilities will exacerbate spread in communities and medical facilities</li> <li>• Limited medical facilities will likely mean high death rates</li> <li>• Medical facilities will be overwhelmed and unable to effectively provide regular and other emergency services</li> <li>• Panic situations may lead to violence</li> <li>• Financial crisis in households will increase stress</li> </ul>	<ul style="list-style-type: none"> <li>• Gender-based/intimate partner violence increases.</li> <li>• Women bear brunt of taking care of sick/elderly.</li> <li>• Gendered nature of the health workforce and the risk for mainly female health workers.</li> <li>• Gendered implications of quarantine, such as whether women and men's different physical, cultural, security, and sanitary needs are recognised.</li> <li>• Women do most of unpaid care so overburdened health services and school closure will greatly strain their time, with consequence of limiting their work and economic opportunities.</li> </ul>
<p>Education</p>	<ul style="list-style-type: none"> <li>• Education facilities will be closed for considerable periods of time</li> <li>• Households will have reduced capacity to afford education</li> <li>• Governments will have reduced capacity to invest in education</li> <li>• Increased child labour in agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• Women do most of unpaid care so school closure will further strain their time, limiting other work and economic opportunities.</li> <li>• Parity in girls' education under threat if hh cannot afford education for all children.</li> </ul>
<p>Resilience</p>	<ul style="list-style-type: none"> <li>• Households will have reduced savings and increased debts</li> <li>• Local and household food stocks may be lower</li> <li>• Households who have lost income earning and/or carers will be much more vulnerable</li> <li>• Government and international community will have reduced capacity to respond to new crises/emergencies</li> </ul>	<ul style="list-style-type: none"> <li>• Possible migration effects with gender-differentiate dynamics and impacts.</li> <li>• Time poverty increases as lower food stocks means women seek alternative, often more time-consuming, food options.</li> </ul>

## 5.2 Vulnerability Factors

Different groups of rural poor will be much more vulnerable to the health and economic effects and COVID-19. While there is currently only limited anecdotal evidence, existing knowledge of these vulnerabilities can help assess likely impacts and target appropriate response measures.

These vulnerability needs to be understood at the individual level and within households, at the household level and in relation to political economic context in which people are living.

At the individual level older people and those with underlying illnesses are particularly susceptible to the virus. In poor rural areas there will be very limited medical facilities to cope and social distancing measures will often be impractical to implement. Consequently, death rates at the upper end of those assessed in countries who had the worst outbreaks are to be expected. Those with existing disabilities are often also extremely poor and are likely to struggle more with social distancing measures and with accessing food.

At the household level levels of income and assets will dramatically affect the resilience of households, their ability to meet immediate food requirements and to recover from the crisis. Women-headed households will be particularly vulnerable.

Currently 1.5 billion people live in fragile and conflict-affected states where the capacity of the state will be minimal in supporting a health, food security and economic rebuilding response. There were more than 135 million people across 53 countries who experienced acute hunger requiring urgent food, nutrition and livelihoods assistance (IPC/CH Phase 3 or above) in 2019<sup>18</sup>. Many of these are in fragile and conflict-affected areas.

#### **Hunger Pandemic Warning**

On 21 April the UN World Food Programme Director [warned](#) of a "hunger pandemic" of "biblical proportions" from a combination of existing food crisis compounded by the impacts of COVID-19. The impacts of the virus could push as many as another 130 million people to the brink of starvation by the end of 2020, nearly doubling the numbers facing crisis levels of hunger to 165 million. He warned that without the resources WFP needs to support those facing starvation 300,000 people could die each day.

### 5.3 Impacts on SDGs

It is early days to assess the impact across all of the SDGs. However in [launching](#) "Shared responsibility, global solidarity: Responding to the socio-economic impacts of COVID-19" the UN Secretary General emphasised that the potential longer-term effects on the global economy and individual countries are "dire".

In terms of rural development food systems the most critical SDGs and indicators are: Goal 1 - End poverty in all its forms everywhere; Goal 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 3 - Ensure healthy lives and promote well-being for all at all ages; Goal 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 5 - Achieve gender equality and empower all women and girls; Goal 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; Goal 10 - Reduce inequality within and among countries, Goal 13 - Take urgent action to combat climate change and its impacts; Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

It is important to be explicit about the impact on the SDGs to underscore the profound impact that fallout for COVID-19 will have on all aspects of development progress for rural people.

[Sumner et al](#) 2020 note that:

"At the global level, the potential impact of COVID-19 poses a real challenge to the UN Sustainable Development Goal of ending poverty by 2030 because increases in the relative and absolute size of the number of poor under the three poverty lines would be the first recorded since 1990 and they could represent a reversal of approximately a decade of progress in reducing poverty. In regions such as the Middle East and North Africa and SSA, the adverse impacts could result in poverty levels similar to those recorded 30 years ago, in 1990. The concentration of the potentially new poor under the US\$1.9/day and US\$3.2/day poverty lines would occur in the poorest regions of

<sup>18</sup> [Global Report on Food Crises 2020](#).



the world, notably in SSA and South Asia, which could accrue together between two thirds and 80–85 per cent of the total poor.”

## 6 The Response

### 6.1 Context

Many individual countries, the IMF and the World Bank and have initiated large scale economic response measures to tackle the health and economic consequences of COVID-19. However, the reality is that even these substantial resources will likely be vastly insufficient to cope with the scale of the crisis if it heads towards the worst-case scenarios.

Many vulnerable low-income countries are already holding high levels of debt, and the impacts on high income country economies will likely create a substantial short- and longer-term squeeze on development financing.

There will be many competing demands and voices on how constrained resources should be directed. The reality is that poor and vulnerable rural communities, on their own, have limited voice and power to sway the wider politics of resource distribution towards their needs. It will thus be critical to carefully monitor the emerging impacts on rural communities and the likely consequences and sure that wider society and decision makers are fully aware of the circumstances and the consequences of insufficient support.

### 6.2 Types of Response

Response measures need to be considered in terms of **emergency response**, **recovery response** and a **systemic response**.

In the emergency phase the focus needs to be on containment, dealing with the ill, providing emergency funds to enable people to meet basic needs, keep food flowing with stable prices and to enable businesses to keep function and not become insolvent.

The **recovery response** will require investments to encourage businesses to increase investments and employment, along with public employment programmes that target income opportunities for the unemployed while rebuilding productive assets to underpin rural economic development. Recreating employment opportunities in the wider economy are also critical to create jobs for rural people and to re-establish remittance flows that are critical to rural households.

The **systemic response** involves rebuilding economic and support systems with fundamental changes to improve resilience, reduce inequalities, tackle climate and environmental challenges and improve food systems. This requires identifying opportunities to do so, building coalitions and alliances for such change and having practical plans that can be integrated into the recovery response.

While short term emergency responses are critical it is necessary to consider recovery and systemic responses at the same time to ensure opportunities are not missed and that unsustainable and inequitable approaches do not become ‘locked’ into economic, social and political systems.

**Box 5: Building Back Better – Thinking Through Systemic Responses**

The COVID-19 crisis comes on top of set of deep structural challenges for society that have profound longer-term impacts for the rural poor. These include:

- The profound impacts **climate change** will have on food systems and vulnerability of rural people to extreme weather events
- The large mismatch between what society needs to eat for **good health** and what is currently being produced and consumed.
- A **changing dynamic** of work as technology, robotics and artificial intelligence may take over increasing numbers of human jobs with profound implications for the future economic opportunities for rural poor people.
- Growing **economic inequality**.
- **Inequitable taxation** arrangements and associated constraints on public services and social protection.
- Weak resilience to global crises such as COVID-19 that disproportionately affect poor people and low-income countries.

Systemic responses require targeting recovery investments towards, infrastructure and human capability to support rural economic development, decarbonising and climate resilience, environmental protection creating incentives or healthier food systems, reconfiguring social protection mechanisms (including considerations of universal basic income) reforming taxation, strengthening the effectiveness of and trust in global institutions and creating mechanisms for greater resilience of the global economy.

### 6.3 Critical Response Measures

In broad outlines there is a high degree of consistency in the main measures being called for by international organisations with responsibilities for rural poverty and food systems and. See for example statement by the [FAO, CFS High Level Panel of Experts, IFAD, CGIAR, CFS and AGRA](#)

In summary the ten main measures emerge as priorities, these are listed below and Table 4 provides key action for each and summarises initiatives being taken:

1. **Protect the health of agriculture and food sector workers** as part of a first line of response to contain the spread of the virus while protecting food production and distribution as an essential service.
2. **Maintain open trade** to avoid a global food price crisis.
3. **Monitor, assess and communicate** to enable early detection and rapid response to emerging food system blockages and food insecurity.
4. Expand and optimise social protection to enable those who have lost income to still have access to food.
5. **Keep agricultural production and food supply chains functioning** by making them the essential services they are.
6. **Maintain and expand food aid** to ensure those affected by food insecurity are protected from hunger and malnutrition
7. **Support the liquidity of agri-food businesses and farmers** to ensure they can keep employing workers and trading.
8. **Invest for recovery and systemic change** by creating investment and employment programmes that enhance rural economies for the future and shift towards more sustainable and equitable models.
9. **Enhance food system resilience**, sustainability and nutritional outcomes to ensure that future shocks to food systems such as new pest and disease outbreaks or extreme weather events don't create crisis upon crisis.
10. **Foster international cooperation and equitable development** to ensure rural people and food systems don't get overlooked in response measures, and that wealthier countries are fully aware of the global consequences of providing too little support too late.

Cutting across all these measures it is critical to take into account gender issues and issues affecting disadvantaged groups, whether due to disability, ethnicity, identity or geographic isolation.

While the **what** needs to be done and **why** is relatively clear and logical, the **how** and **who** is a much more challenging issues particularly given the squeeze that there will be on resources.

Across these ten areas area two areas are particularly critical in the short-term, meeting the needs for social protection and keeping food supply chains functioning. These are discussed in more detail below.

Table 4: Critical Response Measures and Actions

Area	Justification	Indicative Measures
Protect the health of agriculture and food sector workers	This must be a first line of response to contain the spread of the virus while protecting food production and distribution as an essential service. To avoid panic it is critical that consumers have trust in the safety and reliability of food supply.	<ul style="list-style-type: none"> <li>• Clear guidelines provided to business and workers</li> <li>• Maximise social distancing with supply chain and retail functions</li> <li>• Optimise opportunities for safe practices in particular hand washing</li> <li>• Ensure have workers have access to gloves and masks as necessary</li> <li>• Ensure clear and accurate information is shared to all as widely as possible</li> </ul>
Maintain open trade	It has been clearly spelled out that disruptions to global food trade is likely to create a compounding food price crisis with disastrous consequences for poor rural consumers and the costs of providing social protection and food aid in rural areas.	<ul style="list-style-type: none"> <li>• Clear communication about the consequences of trade restrictions</li> <li>• Transparent and regular updates on food stocks and prices to avoid panic, including through AMIS</li> <li>• Globally coordination responses to build trust in global system</li> <li>• Commitment from leaders to minimise unwarranted trade restrictions</li> <li>• Commitment from leaders to ease trade restrictions to facilitate emergency response and recovery</li> </ul>
Monitor, assess and communicate	There remain huge uncertainties and about scale and types of impacts will occur where and over what time frame. Monitoring and assessing what is occurring in rural areas and the impacts of response measures is critical to targeting resources and adapting responses. Combined with effective public communication, it is also critical for avoiding unnecessary panic driven and ill-informed public reactions.	<ul style="list-style-type: none"> <li>• Transparently monitoring and communicating all aspects of the crises to enable rapid responses and to avoid unnecessary panic-driven responses, such as hoarding, trade restrictions or runs on banks.</li> <li>• Mobilising ICT, research capacity and field level observation to detect emerging impacts and consequences for food systems and rural poor</li> </ul>
Expand and optimise social protection	Vast number of people in rural areas including migrant and informal workers returning from urban areas, will have lost income and be at risk of severe food and nutrition insecurity and unable to afford other basic necessities. This will have a compounding effect in rapidly slowing down rural economies.	<ul style="list-style-type: none"> <li>• Immediate support for those who have lost jobs and are unable to meet basic needs</li> <li>• Incentives for businesses to keep workers employed</li> <li>• Food aid</li> <li>• Tailoring social protection to be “productive” to help incentivise economic activity and essential services including food production</li> <li>• Providing credit first loss incentive schemes</li> </ul>
Keep agricultural production and food supply chains functioning	Keep food supply flowing will be critical to avoiding food price rises, and lack of food availability in rural and urban areas. Given the large number of rural people earning income from food system activities including farming and/or depending	<ul style="list-style-type: none"> <li>• Governments to monitor blockages and put in response measures</li> <li>• Increased collaboration for agriculture and sector companies to assess and response to constraints</li> <li>• Strengthen ICT capacity for monitoring</li> </ul>

	on subsistence agriculture, keeping this sector functioning is critical to reducing demand for social protection.	<ul style="list-style-type: none"> <li>• Support “green channels” to coordinate supply to food to urban areas</li> <li>• Declare agriculture and food work as essential services</li> <li>• Create systems for unemployed to meet agricultural and food system labour requirements</li> <li>• Reorient extension services to provide emergency supply chain coordination</li> <li>• Ensure continued provision of inputs including animal feed, seeds and fertilizers</li> </ul>
Support the liquidity of agri-food businesses and farmers	Liquidity of farmers, the large number of micro, small and medium sized businesses, as well as larger firms and access to credit is critical to maintaining food supply. Without this they are unable to afford the inputs needed for production, processing and distribution and run their operations.	<ul style="list-style-type: none"> <li>• Income support measure to help small-scale farmers keep producing</li> <li>• Underwriting rural banks and financial institutions to keep credit flowing to farmers and agri-food businesses</li> <li>• Modifying or delaying taxation requirements and other payments</li> </ul>
Maintain and expand food aid	Food aid is critical for at least the <a href="#">86 million people WFP</a> is working to support this year. These numbers are likely to increase and there must be preparedness to cope with new crises that risk hunger.	<ul style="list-style-type: none"> <li>• Profiling and communicating need for ongoing and increased food aid</li> <li>• Seeking commitment from global leaders to keep supporting and increase food aid for the most vulnerable</li> </ul>
Invest for recovery and systemic change	Innovative measures will be needed to help rural economies recover, at the same time these investments need to help tackle the deeper structural issues that affect sustainable development including lack of infrastructure, environmental degradation, limited jobs and widespread economic inequality.	<ul style="list-style-type: none"> <li>• Allocate funds for public investment in rural areas including for infrastructure and ICT</li> <li>• Create incentives for business to invest in agriculture and rural areas</li> <li>• Integrate social protection measures with business development opportunities</li> </ul>
Enhance food system resilience, sustainability and nutritional outcomes	Prior to COVID-19 the climate vulnerability, unsustainability and poor nutritional outcomes of the food system was already clear. It is critical to strengthen the resilience of food systems along with responding to the immediate crisis	<ul style="list-style-type: none"> <li>• Ensure food buffer stocks are maintained</li> <li>• Increase investments in climate smart agriculture</li> <li>• Reorient agricultural subsidies towards healthier nutrition and sustainable production</li> <li>• Strengthen disease and pest control response measures</li> </ul>
Foster international cooperation and equitable development	COVID-19 threatens to deepen global economic inequalities, efforts are needed to promote a global response and ensure wealthier nations and their leaders are conscious of the global consequences of widespread rural inequality.	<ul style="list-style-type: none"> <li>• Ensure global development issues and consequences for LMICs are kept in social conscience and on global agenda</li> <li>• Articulate consequences for Global North of not equitably supporting Global south</li> <li>• Keep pressure on for equitable global responses</li> </ul>

## 6.4 Emerging Response Measures

March and the first two weeks of April have seen a rapid ramping up of the global and national responses to COVID-19 as the severity of the Pandemic and its severe economic repercussions have become much clearer. G20 and G7 Leaders have issued statements, Western Governments have instituted the largest financial stimulus and support packages ever, UN Agencies have rapidly mobilised and the Multi-lateral Development Banks (MDB) and Multi-lateral Financial Institutions (MFI) have developed financial support measures for LMICs. LMICs are now following suit.

### 6.4.1 Global Level

G20 Leaders in their [COVID-19 response](#) have committed to working together to contain disruption to trade and facilitate flow of critical productions across borders. This has been backed up by a [statement](#) from G20 Trade Ministers. The need for measures to keeping food supply chains functioning has been a key message from both statements. Key responses targeted to LMICs that will include support for rural people and food systems include:

- The [IMF](#) is deploying its entire US\$ 1 trillion lending capacity which includes emergency financing of US\$ 100 billion, grants for debt relief of US\$ 1.4 billion.
- The [G20](#) is suspending repayment of official bilateral credit from the poorest countries
- The [World Bank](#) is will deploy US\$ 160 billion of next 15 months to help countries protect the poor and vulnerable, support businesses, and bolster economic recovery
- IFAD will repurpose ongoing investments in response to COVID-19 to a value of US\$100 million and establish a Rural Poor Stimulus Facility with a target of US\$200 million.

#### Box 5: Tracking Country Responses

The IMF has established a country level [Policy Tracker](#) that summarizes the key economic responses 193 governments are taking to limit the human and economic impact of the COVID-19 pandemic.

The FAO is providing a data base of [policy options for keeping food and agricultural systems alive](#).

The ILO has a [country policy response data base](#) that provides labour related measures implemented by governments, employers' and workers' organizations, and the ILO

IFPRI has a [Food Trade Policy Tracker](#) that shows responses to Covid-19 crisis

### 6.4.2 National Level

Most LMICs have begun introducing fiscal, monetary and macro-financial measures in response to COVID-19 (see [IMF Policy Tracker](#)). Fiscal packages range from 0.1 to 4 percent of GDP and variously target increased health care, social protection, business support, food aid and support for the agriculture sector. However, these resources are likely to be insufficient and there will be enormous challenges in distributing them in ways that will optimise the benefits and ensure that the most vulnerable, particularly in rural communities are reached.

An important next step will be to monitor needs in rural communities and impacts on food systems and to work to align resources that have been allocated to priority interventions.

## 6.5 Meeting the Challenges of Social Protection

The challenge of expanding social protection to meet the needs of the poorest and most vulnerable particularly in rural areas low-income countries and fragile states is immense. The reality is that 55% of people globally have no access to social protection.

In responding to COVID-19 it is important to understand the different types of social protection measures and who these benefit in what ways. Broadly there are three categories. One, social insurance schemes, that workers make a contribution towards, these include unemployment benefits, sick leave, health care etc. Two, social assistance in the form of cash transfers, in-kind transfers such food, and social care services. Three, labour market interventions such as employment incentives, training unemployment benefits etc.

#### Box 7: Resources on Social Protection

Socialprotection.org [webinar series on social protection responses to COVID-19](#)

World Bank and ILO: [Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures](#)

FAO: [Social protection and COVID-19](#)

Better off countries and individuals have social insurance schemes and more generous labour market programmes. There are some social assistance schemes in place to support the extreme poor, funded either by national governments or development assistance. However, there is a vast "missing middle" with most informal rural workers and households not having access to any form of social protection.

Only 45% of the global population is covered by at least one social benefit, and only 21% have adequate coverage most of these are in wealthier countries. 56 percent of the global population living in rural areas are deprived from essential health coverage (ILO, 2014, reported in [FAO, 2020](#)).

There is a massive set financial, policy and logistical issues involved in rolling out a wider set of social protection measures to cope with likely impacts on rural communities.

## 6.6 Meeting the Challenges of Keeping Food Supply Chains Functioning

With current food stocks a short-term disruption may be largely manageable. However, the problems will quickly mount if the health situation demands longer-term social distancing measures and businesses in the agri-food sector start to go bankrupt because of lost markets tightening credit availability. To respond countries will need a systemic approach with a high degree of coordination across ministries. Measures will need to range from social communication to avoid hoarding and panic, to financial support for businesses, providing protective equipment for critical workers, managing domestic food stocks, improving the safety of wet markets and coordinating the flow of critical agricultural and veterinary inputs. Coordinated action will be critical at local levels and along specific value chains, bringing together key government, private sector and civil society actors to identify problems and collectively develop solutions.

The essential starting point is to put in place rapid assessment processes to quickly detect supply chain breakdowns that enable responses before situations escalate. Avoiding global trade restrictions on food will be critical but this will in turn depend on keeping domestic supply chains functioning. If countries see their domestic supply chains come under pressure that are likely to start imposing export restrictions.

Measures may be necessary to create incentives for farm and supply chain labourers to return to work and for agricultural input suppliers to remain open. Agricultural extension services will need to be mobilised to support farmers cope with the circumstances.

### Box 8: Optimising Digital Solutions

The potential for digital solution in managing the crisis is immense. This includes:

- Tracking and synthesising negative impacts
- E-sales and commerce
- Tracking effective response measures
- Rapidly sharing information
- Using mobile banking for social protection payments
- Giving businesses access to credit
- Enabling actors to coordinate

However existing digital capability has often not been tailored to the widescale public good efforts that will be required. Rapid development of solution package will need the full support of tech companies.

Many of the poorest and most vulnerable and people and communities will not have digital access. Great care will be needed to ensure that those who don't aren't further marginalised.

### Box 9: Supporting Small-scale Farmers

Enabling small-scale farmers to keep producing and selling their produce will be essential for two reasons. One, they produced 70% of the food consumed in LMICs, if their production falters in the short or medium term there will be vast ramifications for food security in both rural and urban areas. Two, most rural people are still connected to farming in some way so earning income or having access to food through farming is critical to surviving the current crisis and reducing stress on social protection systems.

Most of the wider measures to help tackle loss of income and protect food supply chains will be equally applicable to small-scale farmers. However, special attention needs to be given to the following:

- Ensuring social protection support actually gets to vulnerable farmers
- Ensuring social support measures create positive rather than negative incentives for a continuing agricultural production
- Preventing unscrupulous exploitation of farmers through input or output markets
- Assisting farmer organisations to provide maximum support for their members
- Assisting NGO organisations to help coordinate rapid response initiatives
- Avoiding an increase in [child labour in agriculture](#)



Across the board governments will need to mobilise a full-spectrum of fiscal, tax, price support and price control measures to help create the necessary incentives. This is a complex task and there will be no right answers. Governments are going to need every bit of support and advice they can get from international agricultural, food and rural development agencies to help make best bet decisions. Gathering insights from what is and is not working in other countries and learning from these will be vital, for example China's "[green channel](#)".

## 6.7 Role of Different Actors

As acknowledged by the UN Secretary General responding to the pandemic will require an unprecedented level of collaboration and cooperation across the public, private and civil society actors. This will be particularly so for rural areas where all three groups of actors are heavily engaged in providing services to rural people and the food and agriculture sector. Further, the inevitable limited capacity of the government to meet all needs will make support that can be mobilised through civil society and community-based organisations, and the private sector essential.

COVID-19 has brought with it new expectations of government with high expectations for its coordinating role and for taking fiscal measures to stimulate economic recovery. "Reduce government and leave it to markets" thinking has become "government must step in and take coordinated action". However, recent decades have seen a decline in public trust in political processes and public institutions and a winding back of the capacity of public services. The response to and recovery from COVID-19 may have significant deeper implications for what society expects from government.

Making wise and equitable decisions that protects the most vulnerable and avoids the risks of a "systems collapse" will require listening to voices of different stakeholder groups and drawing on the best possible information about how the situation is unfolding. A well understood principle of 'adaptive systems' is the need for multiple, effective and rapid feedback loops. Consequently, responding to the crisis requires engaging and listening to different stakeholder and interest groups from local through to global levels. In particular this should ensure that poor and marginalised groups have a voice.

Ultimately, coordinated action will be needed at local levels, both during the crisis and for recovery. It will be critical for organisations supporting the rural poor and food systems to assist this local level action.

For **governments**, there are two key priorities. One, to put in place the emergency strategies to contain the outbreak in rural areas, maximise access to medical support and to keep essential food supplies and services in rural areas functioning. Two, to establish economic stimulus and social protection measures that are specifically targeted to the needs of rural people and agri-food sector enterprises.

**UN Agencies and International Finance Institutions** have a critical role in mobilising and coordinating a global response, advising governments and in mobilising resources for those countries who do not have the resources to protect their people and their economies during the crisis. It is essential that the specific needs of rural people and food systems are at the forefront of the thinking and the work of international agencies at both national and international levels.

Ultimately it is the **private sector** who has the capability to employ people and the knowledge, skills, infrastructure and logistic systems to keep food supply chains functioning. In these unique times it is essential that they contribute in whatever ways they can while remaining their liquidity.

In rural areas **farmer organisations** will have a critical and fundamental role in supporting their members, coordinating with government and private sector and helping to put in place emergency responses. They can be a critical conduit through which government resources can also flow, provided they operate transparently and equitably.

Much local level support for those affected will need to come from local community organisations with backing from a wider network of **civil society organisations**. Such organisations can also play a vital role in assisting to tackle blockages that may be emerging in local food supply chains. Civil society will have a critical role in helping promote the needs of the rural poor, mobilising and directing philanthropic funds and contributing to transparent and accountable response strategies.

As indicated above adaptive systems hinge on good and rapid feedback. There is a critical role for **research institutions** in collecting, analysing, modelling and synthesising data and information as the crisis unfolds. They also have a critical role in providing lessons from past experiences and in generating the promoting the ideas, strategies and innovations that will be needed to cope with the crises and build back ways that will enable greater resilience and equity in the way rural economies and food systems operate.

## 7 Conclusion

The disproportionate impact of COVID-19 on poor and vulnerable groups, and by implication on rural people and small-scale farmers, has been widely acknowledged, as has been the critical need to keep food supply chains functioning. The full scale of the impact of COVID-19 on LMICs is yet to become clear. However, given the scale of COVID-19 health impacts in the first wave of countries to be affected, and the projected depth of the associated economic recession, the prospect of a rapidly escalating crisis for LMICs with massive impacts on rural poor is looking inevitable

In such a scenario the gap between the capacity and resources needed to protect poor rural people over both the short and longer run is likely to be immense. This raises the spectre of humanitarian crises across many countries at the same time, with the potential for significant social unrest, political instability and increased migration.

National governments and development agencies need to urgently consider this eventuality and how to respond. Three elements will be critical:

- 1) Careful targeting and efficient use of limited financial and human resources,
- 2) Substantial support from high-income countries, despite their own difficulties, for globally coordinated action and investments in LMICs,
- 3) Mobilising non-state actors including local community groups, the private sector, national and international NGOs and faith-based groups to help fill gaps in whatever ways they can.

It will be critical to keep the plight of rural people at the forefront of minds in national and international responses. It is essential that policy makers and the wider public are made fully aware that a collapse in rural communities brings a high risk of major disruptions to food production with catastrophic implications for the food security both urban and rural populations.

## Appendix 1: References

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## Appendix 2: Key Data Table

Key Indicator	Data	Date	Source
<b>Levels of infection and death rates</b>	WHO daily reports on the levels of infections and death rates worldwide. As of 16 <sup>th</sup> of April 2020: Globally total (new cases in last 24 hours) 1 991 562 confirmed (76 647) 130 885 deaths (7875)	Daily, 2020	<a href="#">Daily reports</a> (WHO, 2020)
<b>COVID-19 Global Infection Rates</b>	In absence of interventions 7 billion infections (mitigation could reduce this by half or more)	26/3/2020	<a href="#">Imperial College London</a>
<b>COVID-19 Global Death Rates</b>	In absence of interventions 40 million deaths (mitigation could reduce this by half or more)	26/3/2020	<a href="#">Imperial College London</a>
<b>Over demand for critical care beds</b>	Factor of 7 in high-income countries and factor of 25 in low-income countries, assuming substantial mitigation measures	26/3/2020	<a href="#">Imperial College London</a>
<b>Reduction in GDP</b>	Contraction of global GDP by -3%, reduction of -6.4% since October 2019	03/2020	<a href="#">IMF</a>
	Contraction of GDP in emerging and developing economies of -1%, reduction of 5.6% since October 2019	20/03/2020	<a href="#">IMF</a>
<b>Increase in poverty</b>	140 million people could fall into extreme poverty (<US\$ 1.90/day) based on IMF projections of GDP Decline	16/04/2020	<a href="#">IFPRI</a>
	Under the most extreme scenario of a 20 per cent income or consumption contraction, the number of people living in poverty (under US\$ 5.50/day) could increase by 420–580 million, relative to the latest official recorded figures for 2018.		<a href="#">UNU-Wider</a>
	Global models predict that for every percentage point of global economic slowdown, the number of people living in poverty would increase by 2-3%, or by about 14-23 million worldwide.	10/04/20	<a href="#">IFPRI</a>
<b>Impact of lockdowns on work</b>	2.7 billion workers, representing around 81 per cent of the world's workforce	7/4/2020	<a href="#">ILO</a>
<b>Loss of jobs</b>	Workinghours will decline by 6.7 per cent in the secondquarter of 2020, which is equivalent to 195 million full-time workers	1/4/2020	<a href="#">ILO</a>
<b>Access to social protect</b>	Globally: 45.2% Africa: 17.8% Asia and Pacific:38.9%	7/4/2020	<a href="#">ILO</a>
<b>Foreign Direct Investment Flows</b>	Net portfolio flows, both debt and equity, from main emerging economies amounted to \$59 billion in the month since the Covid-19 crisis went global (21 February to 24 March). This is more than double the portfolio outflows experienced by the same countries in the immediate aftermath of the global financial crisis (\$26.7 billion).	4/2020	<a href="#">UNCTAD</a>

## Appendix 3: Preliminary Annotated Bibliography

### Key References and News Reports Related to COVID-19 and Impact on Rural People and Food Systems

Sorted by source

10/5/2020

Author	Date	Year	Sources	Title	Summary
Hawkes, Corinna	5/5/20	2020	4SD	<a href="#">Our Life Support System: Covid-19 Shows Multiple Systems Are Vital For Global Health</a>	<ul style="list-style-type: none"> <li>• Need to understand how interconnected health, food, environmental, social and political systems all are.</li> <li>• Without healthy food, we increase the risk of obesity and diet-related non-communicable diseases that make us more vulnerable to complications of COVID-19. The coronavirus simply focused our minds on an obvious but systematically overlooked fact: that how food systems function matters for health and wellbeing.</li> </ul>
ADB		2020	ADB	<a href="#">COVID-19 Economic Impact Assessment Template</a>	<ul style="list-style-type: none"> <li>• Analysis of sector GDP and employment loss for countries in Asia</li> <li>• Worst case is up to – 2%</li> </ul>
ADB	6/3/20	2020	ADB	<a href="#">The Economic Impact of the COVID-19 Outbreak on Developing Asia</a>	<ul style="list-style-type: none"> <li>• Impact through numerous channels – drop in domestic demand, lower tourism and travel, disruption to supply chains and health</li> <li>• Scale of impact still hard to assess need to consider scenarios</li> <li>• 0.1% to 0.4% impact on global GDP with 2/3 impact on China</li> </ul>
Simon Buchler	30/1/20	2020	African Law & Business	<a href="#">What impact will Covid-19 have on food security in Africa?</a>	<ul style="list-style-type: none"> <li>• Africa contains 25% of the global landscape suitable for crop cultivation which is more than sufficient to drive the continent’s economic development and adequately feed its own population. Yet since the 1980s, Africa has been a net importer of agricultural goods. This over-reliance on imports is driven by increasing urban demand and compounded by weak infrastructure and inefficient farming methods. Critically, it places much of Africa at significant risk of exposure to global economic shocks such as Covid-19.</li> <li>• According to the World Bank report, agricultural production is likely to contract between 2.6% - 7% with food imports declining substantially by up to 25%. There are four key effects of this pandemic on Africa’s agricultural industry that will likely impact food security: <ul style="list-style-type: none"> <li>• Labour shortages due to movement restrictions and health</li> <li>• Restrictions on imports and exports</li> <li>• Last mile disruptions to markets</li> <li>• Prices fluctuations</li> </ul> </li> </ul>
Ruerd Ruben, John	20/4/20	2020	Agriculture for	<a href="#">Reshaping Food Systems After Covid-19</a>	<ul style="list-style-type: none"> <li>• The present crisis overwhelmingly shows the reality of the worries many of us have about current food systems and strongly confirms the need to fundamentally reshape their organization</li> </ul>

Author	Date	Year	Sources	Title	Summary
McDermott, and Inge Brouwer			Nutrition and Health (CGIAR)		<ul style="list-style-type: none"> <li>• Biophysical, Demographic, infrastructure, socio-cultural, and political economic drivers are all influencing impact of COVID-19 on food systems components including production, trade, demand, market functioning, food environment and consumer behaviour.</li> <li>• The outbreak and spread of the COVID-19 virus makes the shortcomings of our current food system – often described in international reports – painfully clear</li> <li>• Combined with an already growing feeling of "being fed up" with present food systems and the call for radical change, the crisis provides opportunities to carry out a "re-set" of our food systems, to determine what is important and what is not, to revalue the role of public goods, to reconsider "basic income" for all, etc.</li> </ul>
Mpungu, P.	29/3/20	2020	Al Jazeera	<a href="#">COVID-19: Kenyans brace for tough times as economic shock looms</a>	<ul style="list-style-type: none"> <li>• Crisis hit Kenya at a turbulent time, further exposing an economy already weighed down by rising public debt - standing at \$60bn as of September 2019 - years of missed revenue collection targets and a budget deficit hovering at more than six percent of GDP.</li> <li>• Central Bank of Kenya, downgraded economic growth prospects for 2020 from 6.2 percent to a conservative 3.4 percent</li> <li>• \$1bn in emergency funding from the International Monetary Fund (IMF) and the World Bank to prop up its slowing economy in the face of the crisis.</li> <li>• But nearly 80 percent of households in the country have no place for hand-washing in or near the toilet, according to the 2018 Kenya Integrated Household Budget Survey</li> </ul>
ALLFED	31/3/20	2020	ALLFED	<a href="#">Feeding everyone no matter what</a>	<ul style="list-style-type: none"> <li>• Perspectives on food security in times of catastrophe</li> </ul>
AMIS	2/4/20	2020	AMIS	<a href="#">AMIS Market Monitor No.77 April 2020</a>	<ul style="list-style-type: none"> <li>• Potential implications of the rapid spread of COVID-19 on global food markets</li> <li>• Despite the many uncertainties caused by the crisis, global food markets continue to be seen well balanced: cereal stocks are expected to reach their third-highest level on record this season and export availabilities for all AMIS crops are more than adequate to meet the anticipated demand.</li> <li>• While the impact of the COVID-19 crisis on global food markets has so far been limited, the pandemic poses a serious threat to food security at local level</li> <li>• According to official statistics, the virus has not yet spread widely in countries where food insecurity is pervasive, most notably in Sub-Saharan Africa</li> <li>• If it did, the outbreak could be expected to have similar effects to previous epidemic-induced shocks, such as the Ebola Virus Disease, which caused steep harvest reductions, food price spikes and aggravated food insecurity</li> </ul>
South Asia Centre	31/3/20	2020	Atlantic Council	<a href="#">South Asia's economic outlook in the era of COVID-19</a>	<ul style="list-style-type: none"> <li>• Detailed analysis of current efforts of the governments of Bangladesh, India and Pakistan and the potential economic consequences of the coronavirus pandemic on South Asia</li> </ul>
Rubinstein, P.	2/4/20	2020	BBC Worklife	<a href="#">Why grocery shelves won't be empty for long</a>	<ul style="list-style-type: none"> <li>• As April begins and shoppers continue to bulk-buy, grocery chains have jumped into action. Retailers have united with manufacturers, warehouse workers and supply chain operators to implement emergency policies to meet these skyrocketing demands</li> <li>• The supply chain relies on several industry-spanning mechanisms that are designed to adapt when natural disasters strike – or when food sectors need to pivot during seasonal production spikes.</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<ul style="list-style-type: none"> <li>Adjusting to shoppers' changing demand in the wake of Covid-19 has been a herculean task, but experts agree that doing so is well within the system's control – and not cause for alarm</li> <li>Between grocery stores, retail distribution centres, regional distribution centres and production facilities - These four nodes of the general supply chain are in <b>perpetual ownership of about four months of food</b>, ready and waiting to be transported, ordered, delivered and stocked</li> <li>The true source of the empty-shelf issue lies inside the retail shops themselves. "In other words, and in many occasions, supermarkets do actually have products in their storerooms, but they do not have enough staff to bring it to the shelves as fast as they are taken from them,"</li> <li>US-based Aldi will recruit 5,000 temporary and 4,000 permanent staff, and Albertsons plans to bring on 30,000. Tesco in the UK has announced it will be hiring 20,000 temporary workers</li> </ul>
Care		2020	Care	<a href="#">Gender implications of covid-19 outbreaks in development and humanitarian settings</a>	<ul style="list-style-type: none"> <li>Less than 1 percent of published research papers on the 2014–16 West Africa Ebola virus disease (EVD) outbreak and the 2016 Zika outbreak focused on the gender dimensions.</li> <li>Set of gender related recommendations for COVID-19 response</li> </ul>
Care	29/4/20	2020	Care	<a href="#">COVID19, Food &amp; Nutrition Security, and Gender Equality</a>	<ul style="list-style-type: none"> <li>Women already bear the brunt of hunger. 60% of the hungry people and 76% of displaced people in the world are women and girls. Women-headed households are the most likely to suffer from food crisis. Add that to the incredible burden COVID19 is putting on women, rising rates of GBV, and the other gender implications of COVID19, and the potential impacts are staggering.</li> <li>For women to further unleash their leadership, we need to transform the social norms and barriers that stand in their way as they respond to crises, feed their families, influence markets, and negotiate a better future.</li> <li>Women are key but under recognised part of the food system, yet bearing much of the brunt of COVID-19</li> <li>Need to build back better to empower women's role in food systems.</li> </ul>
Evans, D.	3/4/20	2020	Centre for Global Development	<a href="#">The Economic Impact of COVID-19 in Africa: A Round-Up of This Week's Analysis</a>	<ul style="list-style-type: none"> <li>Excellent set of links on Africa to follow up</li> </ul>
CFS HLPE	24/3/20	2020	CFS	<a href="#">Impact of COVID-19 on Food Security and Nutrition</a>	<ul style="list-style-type: none"> <li>Much bigger impact of southern economies now than during SARS epidemic</li> <li>Already poor state of global food security in the world</li> <li>Global GDP drop to 1.5%</li> <li>Poor FNS reduces immune system</li> <li>The most affected will be the poorest and most vulnerable segments of the population (including migrants, displaced, those in fragile states or affected by conflicts)</li> <li>Consequences will depend on duration of outbreak and difficult to predict but could be severe</li> <li>The ILO preliminary assessment suggests that dropping global GDP growth by 2-8% would lead to the loss of 5.3- 24.7 million jobs. This in return, implies large income losses for workers, estimated at US\$ 860 million to US\$ 3.44 billion.</li> <li>Dependence of farmers on off farm income to operate</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<ul style="list-style-type: none"> <li>• Medium and longer term disruptions to food value chains (sick worker, lack of inputs, lack of labour)</li> <li>• Impact of shut down of school feeding programs</li> <li>• Closing of public and private sector is creating job losses with impact on poverty</li> <li>• Particular impact for areas already in crisis situation</li> <li>• Risk of reduced ODA</li> <li>• Impact on food supply: disruptions to supply chains; panic buying; reduced food production;</li> <li>• Impact on food access; decreased incomes low wage and casual workers; loss of jobs; loss of remittances; less access to nutritious foods;</li> <li>• Key messages:                             <ul style="list-style-type: none"> <li>○ Instability in and disruption to food supply</li> <li>○ Poorest most affected</li> <li>○ Need for great resilience in food system</li> <li>○ Impact of secondary effects of COVID-19 on food systems</li> </ul> </li> <li>• Recommendations:                             <ul style="list-style-type: none"> <li>○ CFS take lead role</li> <li>○ Government prioritise most vulnerable</li> <li>○ Social protection mechanism, with right to food, need to provide short-term essential assistance and longer term livelihood support</li> <li>○ Support food supply chains</li> <li>○ Enable agricultural production</li> <li>○ Optimise local food systems</li> <li>○ Guidelines for food workers to minimise COVID-19 spread</li> <li>○ Collate and share data</li> </ul> </li> </ul>
Tiensen T., Kalibata A., Cole M.	1/4/20	2020	CFS/AGRA/ Project Syndicate	<a href="#">Ensuring Food Security in the Era of COVID-19</a>	<ul style="list-style-type: none"> <li>• Governments need to conduct transparent dialogues with businesses, technical agencies, academia, and civil society to address the emerging risks. We need to build on existing global mechanisms such as the Committee on World Food Security to prevent nutrition crises</li> <li>• Governments should establish or strengthen social-protection mechanisms</li> <li>• It is essential that we increase the resilience of our food systems. Strengthening the management of markets and building redundancy to prevent supply-chain disruptions</li> </ul>
O'Donnell, M.			CGDEV	<a href="#">Playing the Long Game: How a Gender Lens Can Mitigate Harm Caused by Pandemics</a>	<ul style="list-style-type: none"> <li>• Promote gender-equal health workforce</li> <li>• Protect and expand health resources for women</li> <li>• Reduce and redistribute unpaid care work burdens</li> <li>• Address gender-based violence</li> <li>• Guarantee girls education</li> <li>• Promote women's economic opportunities</li> <li>• Ensure Women's Representation in Decision-Making and critical research</li> </ul>



Author	Date	Year	Sources	Title	Summary
Hauser, M.	24/3/20	2020	CGIAR	<a href="#">COVID-19-measures, daily laborers and their nutrition</a>	<ul style="list-style-type: none"> <li>• In LMICs high proportion of day labourers who will be adversely affected by lockdowns with no social protection – impact for household income and labour availability</li> </ul>
CGIAR	29/3/20	2020	CGIAR	<a href="#">CGIAR's Response to COVID-19</a>	<ul style="list-style-type: none"> <li>• Urgent coordinated response is needed – especially for more vulnerable</li> <li>• Food systems already being significantly affected – impact on planting season, trade disruptions, food price panics, labour shortages, impact on water demand</li> <li>• CGIAR will focus on monitoring and providing sound policy recommendations</li> </ul>
Andrew Challinor, Dhanush Dinesh	7/5/20	20	CGIAR	<a href="#">How we can use the COVID-19 disruption to improve food systems and address the climate emergency</a>	<ul style="list-style-type: none"> <li>• The novel coronavirus increasingly illuminates a serious underlying fragility that goes well beyond health. This fragility stems from the fact that our health, energy, finance, and food systems are all inextricably connected.</li> <li>• Seventy-nine percent of economically active women in least developed countries rely on agriculture as their primary source of livelihood.</li> <li>• COVID-19 will bring to the fore the consequences of our failure to adequately mitigate climate change and find adaptation solutions in agriculture</li> <li>• When all of this is over, what kind of world do we want to go back to? The responses to COVID-19 around the globe demonstrate that speedy, collective action is possible. We have shown ourselves that we are capable of drastic lifestyle changes when called upon to act in the name of the greater good. 2019 was the year we woke up to the climate emergency; the year the language changed. It's imperative not to lose the momentum we've worked hard to build—and to do this, we will need to make the most of the current situation.</li> </ul>
Leena Koni Hoffmann, Paul Melly	1/5/20	2020	Chatham House	<a href="#">Coronavirus Risks Worsening a Food Crisis in the Sahel and West Africa</a>	<ul style="list-style-type: none"> <li>• The COVID-19 pandemic has struck the Sahel and West Africa at a time when the region is already under severe pressure from violent insecurity and the effects of climate change on its land, food and water resource</li> <li>• The Food Crisis Prevention Network (RPCA) forecast in early April that almost 17 million people in the Sahel and West Africa (7.1 million in Nigeria alone) will need food and nutritional assistance during the coming lean season in June–August (opens in new window), more than double the number in an average year. The combined impact of violent insecurity and COVID-19 could put more than 50 million other people across the region at risk of food and nutrition crisis.</li> <li>• The effects of the collapse in global commodity prices, currency depreciations, rising costs of consumer goods and disruptions to supply chains are rippling across the region. And for major oil-exporting countries such as Nigeria, Ghana, Chad and Cameroon, the wipe-out of foreign currency earnings will hammer government revenues just as the cost of food and other critical imports goes up.</li> </ul>
Shenggen, F.	6/3/20	2020	China Daily	<a href="#">Preventing global food security crisis under COVID-19 emergency</a>	<ul style="list-style-type: none"> <li>• Need to learn from previous epidemics</li> <li>• Food prices will shoot up if nations panic again - The 2008 food price crisis, caused by droughts in Australia and Argentina, showed increasing oil prices, rising use of food grains for biofuel production and trade policy failures</li> <li>• Act now to prevent food security crisis - First, there is a need to closely monitor food prices and markets. Transparent dissemination of information will strengthen government management over the food</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<p>market, prevent people from panicking, and guide farmers to make rational production decisions. Second, it is necessary to ensure international and national agricultural and food supply chains function normally</p> <ul style="list-style-type: none"> <li>• Innovative methods to keep sales growing</li> <li>• Vital to have safeguards against zoonotic diseases</li> <li>• Critical to keep global trade open - it is important to ensure the smooth flow of global trade and make full use of the international market as a vital tool to secure food supply</li> </ul>
Ziady, H.	1/3/20	2020	CNN	<a href="#">Can't find what you want in the grocery store? Here's why</a>	<ul style="list-style-type: none"> <li>• Food supply chains in developed economies are showing increased signs of strain as nationwide lockdowns designed to curb the spread of the coronavirus heap pressure on systems that had very little slack to begin with. The result is empty store shelves, and panicked buyers.</li> <li>• The transportation links that move food around the globe are being tested in unprecedented ways. Shipowners are struggling to change crews and move goods between ports. Airlines have grounded thousands of planes, slashing air freight capacity.</li> </ul>
Wiener-Bronner, D.	31/3/20	2020	CNN	<a href="#">What happens to our food supply if American farmers can't farm?</a>	<ul style="list-style-type: none"> <li>• Farmers have very little flexibility. They're on a strict planting and harvesting schedule and cannot ramp up or decrease production at will</li> <li>• April and May are critical planting and harvesting times for many US farmers. They need skilled laborers to work their fields, and a reliable supply chain to deliver their goods</li> <li>• If farmers can't find enough workers or if their farming practices are disrupted because of the pandemic, Americans could have less or pricier food this summer</li> <li>• As efforts to contain the coronavirus pandemic limit consular services, US farmers are worried they won't be able to hire the international workers they rely on</li> <li>• The spike in the number of visa holders is "one of the clearest indicators of the scarcity of farm labor," said the USDA.</li> <li>• The 2015-2016 National Agricultural Workers Survey, the most recent of its kind, found that 69% of hired farm workers interviewed for the survey were born in Mexico. Only 24% were born in the United States.</li> <li>• People without experience could theoretically transition to agricultural work. "Farmers will hire anybody that they could right now, I would bet you." But they wouldn't be very efficient, and could slow down farm operations and it's unlikely that unemployed Americans will actually seek agricultural jobs</li> <li>• If the pandemic stops domestic agricultural workers from doing their jobs over the next two or three months, US farmers will need a new influx of international employees. The current adjustments don't offer a road map for that possibility</li> <li>• Before the pandemic, demand in food service was "very predictable," he added. But now, with restaurants closing their doors and grocery stores seeing surges in purchases, it'll be harder for farmers to know how much they'll be able to sell and to whom</li> <li>• The inability to plan could exacerbate the country's food waste problem, and make it harder for the food insecure to eat</li> </ul>
Wiener-Bronner, D.	13/04/20	2020	CNN Business	<a href="#">One of the largest pork processing facilities in the</a>	<ul style="list-style-type: none"> <li>• One of the country's largest pork processing facilities is closing until further notice as employees fall ill with Covid-19</li> <li>• The closure puts the country's meat supply at risk, said the CEO of Smithfield, which operates the plant</li> </ul>

Author	Date	Year	Sources	Title	Summary
				<a href="#">US is closing until further notice</a>	<ul style="list-style-type: none"> <li>• The Sioux Falls, South Dakota, facility accounts for 4% to 5% of the country's pork production and employs about 3,700 people</li> <li>• Smithfield employees accounted for more than half of the active coronavirus cases in the state</li> <li>• The problem extends beyond South Dakota. Meat processors in Iowa and Pennsylvania have also shut their doors because of sick employees</li> <li>• The closure of this facility, combined with a growing list of other protein plants that have shuttered across our industry, is pushing our country perilously close to the edge in terms of our meat supply," the meat processor's chief executive, Kenneth Sullivan, said in a statement</li> </ul>
Daily Nation Kenya	26/3/20	2020	Daily Nation Kenya	<a href="#">Covid-19 fears cast shadow over food safety</a>	<ul style="list-style-type: none"> <li>• Seed producers have suspended operations – including Kenya Seed Company</li> <li>• Selling uncertified seed to farmers</li> <li>• Farmer report not having access to inputs or not taking risk to go and purchase</li> <li>• Lack of labour</li> <li>• Combined impact with other climate induced issues and pest and disease outbreaks</li> </ul>
Kilpatrick, J., Barter, L.		2020	Deloitte	<a href="#">COVID-19 Managing supply chain risk and disruption</a>	<ul style="list-style-type: none"> <li>• China's role and importance to global trade (as a primary producer of high value products and components, as a large customer of global commodities and industrial products, and as a very attractive consumer marketplace)</li> <li>• While COVID-19 may be the catalyst for companies to revisit their global supply chain strategy and accelerate the adoption of Digital Supply Network models and capabilities, short-term actions need to be made to respond to the immediate challenge.</li> <li>• Detailed action points for companies that operate or have business relationships in China and other impacted geographies as well as for companies that produce, distribute, or source from suppliers in China and other impacted geographies and that sell industrial products, commodities, or consumer products to China and other impacted geographies</li> <li>• Most important things for new supply chain models</li> </ul>
Arun Baral, Aparna Das, Bill Rustrick	4/5/20	2020	Devex	<a href="#">COVID-19 highlights need to boost resilience of Africa's rural poor</a>	<ul style="list-style-type: none"> <li>• The COVID-19 situation also highlighted the need to ensure that smallholder farming families — as well as other low-income populations — are better able to weather shocks, be they health threats like COVID-19, droughts, crop infestations, or otherwise.</li> <li>• The situation also highlighted the need to ensure that smallholder farming families — as well as other low-income populations — are better able to weather shocks, be they health threats like COVID-19, droughts, crop infestations, or otherwise.</li> </ul>
Kapil, S.	26/3/20	2020	Down to Earth	<a href="#">COVID-19: The world scrambles for food</a>	<ul style="list-style-type: none"> <li>• India announces free cereals for poor for 3 months and 1.7 lakh crore package to provide pulses and what or rice to 800 million</li> <li>• Vietnam has suspended rice exports</li> <li>• Kazakhstan has been wheat export</li> <li>• Food shortages in supermarkets</li> <li>• UNCCD 70 countries in drought 45 million in SSAMay face food insecurity. WFP has only half of funds needed for 8.3 million people currently facing food insecurity</li> </ul>

Author	Date	Year	Sources	Title	Summary
Abhishek, Bhamoriya, V., Gupta, P., Kaushik, M., Kishore, A., Kumar, R., Sharma, A., Verma, S.	11/4/20	2020	Economic and Political Weekly	<a href="#">India's Food System in the Time of COVID-19</a>	<ul style="list-style-type: none"> <li>India's complete lockdown has caused unnecessary disruptions in the food supply chain, with the scarcity of labour making it even worse</li> <li>On 23 March 2020, the Government of India declared a complete lockdown for three weeks in response to the COVID-19 outbreak</li> <li>A sharp decline in demand is imminent with the financial sector being in a freeze and incomes having shrunk for everyone, except for the small salaried class</li> <li>The financial sector in India has been under stress for a while now and the lockdown and the associated fear of disruptions in cash flows and the collapse of demand have led to a complete credit freeze.</li> <li>In rural India 85% of the workforce do not have salaried jobs vis-à-vis 53% in the urban areas. Even among those with salaried jobs, 46% do not get "paid leave" and more than 70% work without any written contracts (NSO 2019). This overwhelming dependence on casual jobs and self-employment means that almost 90% of all Indian households will experience a sharp decline in incomes within a month</li> <li>India's food system is only a part of its economy, but we will not be able to control the pandemic if its food system collapses. Enforcing necessary measures like the lockdown will become impossible if people do not have enough food and money to fulfil basic needs. The immediate policy challenge, therefore, is to restore food supplies and the purchasing power of poor households without exposing them to greater risk from the virus</li> </ul>
Economic and Political Weekly	2020	2020	Economic and Political Weekly	<a href="#">Abrupt Planning, Looming Hunger</a>	<ul style="list-style-type: none"> <li>Policy short-sightedness makes millions face the trade-off between the pandemic and starvation deaths</li> <li>In the case of food supply, for example, midstream operations like transportation/logistics, storage and warehousing, grading and sorting, etc, have increasingly assumed importance over time, with about two-thirds or more of the food market share in India accruing to the urban sector. With these operations largely being labour-intensive, barricading the worksites from the workers has unsettled the supply chain from the producers to the consumers.</li> <li>it cannot be ignored that the operations in the primary markets are contingent upon the marketing conditions prevailing in the secondary markets, which act as the conduit between the rural production sites and the urban consumption centres. With the secondary markets being in the small towns/peri-urban areas, these have come under the lockdown. As a result, when the rural traders are unable to sell their stock in the secondary markets, they do not buy from the farmers in the primary markets.</li> <li>Compared to the enormity of the peril, the government's initiatives—such as, routing the surplus cereals of the Food Corporation of India to community kitchens and public distribution system networks, without exempting transport and logistics from the lockdown, or announcing a `1.7 lakh crore fiscal stimulus, instead of conscious and consistent policy efforts towards demand revival—are largely inadequate</li> </ul>
Economist	9/5/20	2020	Economist	<a href="#">The global food supply chain is passing a severe test</a>	<ul style="list-style-type: none"> <li>But the unsung star of 21st-century logistics is the global food system (see article). From field to fork, it accounts for 10% of world gdp and employs perhaps 1.5bn people. The global supply of food has nearly tripled since 1970, as the population has doubled to 7.7bn. At the same time, the number of people who have too little to eat has fallen from 36% of the population to 11%, and a bushel of maize or cut of beef</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<p>costs less today than 50 years ago in real terms. Food exports have grown sixfold over the past 30 years; four-fifths of people live in part on calories produced in another country.</p> <ul style="list-style-type: none"> <li>• Despite the severity of today's shock, each layer of the system has adapted. The supply of cereals has been maintained, helped by recent harvests and very high stocks. Shipping firms and ports continue to move around food in bulk. The shift from eating out has had dramatic consequences for some companies. McDonald's sales have dropped by about 70% in Europe. The big retailers have cut their ranges and rewired their distribution. Amazon's grocery e-commerce capacity has risen by 60%; Walmart has hired 150,000 people. Crucially, most governments have learned the lesson of 2007-08 and avoided protectionism. In terms of calories, only 5% of food exports face restrictions, as against 19% back then. So far this year prices have dropped.</li> <li>• But the test is not over yet. As the industry has globalised, it has grown more concentrated, creating bottlenecks. Covid-19 outbreaks at several American slaughterhouses have cut pork supplies by a quarter—and boosted wild-turkey hunting licences in Indiana by 28%. America and Europe will need over 1m migrant workers from Mexico, north Africa and eastern Europe to bring in the harvest. And as the economy shrinks and incomes collapse, the number of people facing acute food shortages could rise</li> <li>• Governments need to hold their nerve and keep the world's food system open for business.</li> </ul>
Economist Intelligence Unit	26/3/20	2020	Economist Intelligence Unit	<a href="#">The coronavirus could devastate poor countries</a>	<ul style="list-style-type: none"> <li>• Will cause the most brutal recession in living memory</li> <li>• Social distancing impossible and impractical in many places and slums</li> <li>• People will go out anyway as they need to eat</li> <li>• Weak and misguided political responses e.g. Brazil, Tanzania – places still in denial</li> <li>• Autocratic way of strengthening power</li> <li>• Positive – younger population, hot weather, experience of Ebola</li> <li>• 2/3 of people on &lt; 1000USD/day in rural areas</li> <li>• But many poor people have reduced immune systems and underlying diseases</li> <li>• Lockdown won't be sustained without government safety-nets</li> <li>• Demand for commodities on which emerging economies depend have collapsed – oil, tourism, flowers</li> <li>• 83 billion pulled from emerging markets since start of crisis</li> <li>• Remittances will tumble</li> <li>• Governments will face balance-of-payments crisis and collapse of revenues, rich countries can borrow cheaply but poor countries cant borrowing costs will soar</li> <li>• Trade-off between saving people from virus vs dying from hunger (Imran Khan)</li> <li>• Better-off countries taking nationalist turn</li> <li>• For poor food importing countries trade restrictions will be deadly</li> <li>• Open information is critical</li> <li>• Requires co-ordinated global effort</li> </ul>
FAO		2009	FAO	<a href="#">The State of</a>	<ul style="list-style-type: none"> <li>• Assessment of impact of financial and food crisis</li> </ul>

Author	Date	Year	Sources	Title	Summary
				<a href="#">Food Insecurity in the World</a> <a href="#">Economic crises – impacts and lessons learned</a>	
Ocampo, A.	08/04/20	2020	FAO	<a href="#">Social protection and COVID-19 response in rural areas</a>	<ul style="list-style-type: none"> <li>• Implementing adequate social protection measures in response to COVID-19 is critical to saving both lives and livelihoods. Ensuring that these measures reach rural populations will be key to avoid further spread of poverty and hunger.</li> <li>• The fight against COVID-19 will be particularly challenging in rural areas. Vulnerable rural populations, in particular women, will be significantly affected by the direct and indirect economic impact of COVID-19, leading to an increase in hunger and poverty.</li> <li>• Social protection can ensure critical access to health care, provide incentives for compliance with confinement measures, and support income protection for those affected to bounce back from economic and health-related shocks. Social protection's fundamental role is to support risk management. For this reason, 418 social protection schemes have already been adopted or expanded globally to respond to COVID-19.</li> <li>• Ensuring that social protection measures are adopted and reach rural populations will be critical. The impact of these measures will be severely hampered unless the barriers faced by the rural population, in particular women, children, informal workers, migrants and indigenous groups, to access social protection are explicitly addressed.</li> <li>• Most measures adopted so far emanate from high- or middle-income countries. While some lower middle-income countries have started taking appropriate measures, the number of low-income countries is still very low (as of 3 April 2020). Low-income, as well as fragile economies, tend to have less developed social protection systems, with limited social insurance coverage, and some patchy social assistance programmes in place, with low institutional capacity and financial constraints that limit universal expansion. Even in these contexts, social protection measures need to be broadly implemented. Challenges to address will be in particular to identify target populations, reach them and actually deliver benefits.</li> <li>• Financing will be a critical challenge to address. In some cases, innovation must be found in budget reallocations, while in others, international solidarity and support will be required.</li> </ul>
FAO	10/4/20	2020	FAO	<a href="#">FAO's Big Data tool on food chains under the COVID-19 pandemic</a>	<ul style="list-style-type: none"> <li>• This open-access tool developed by the FAO Data Lab gathers, organises and analyses daily information on the impact of the COVID-19 pandemic on food and agriculture, value chains, food prices, food security and undertaken measures. Its ultimate aim is to provide countries with facts and information on how the pandemic is impacting the food chains to build their decisions.</li> </ul>
FAO	2020	2020	FAO	<a href="#">COVID-19: Our hungriest, most vulnerable communities face "a crisis within a crisis"</a>	<ul style="list-style-type: none"> <li>• Even before COVID-19 hit, 113 million people on the planet were already struggling with severe acute food insecurity due to pre-existing shocks or crises.</li> <li>• If food supply chains become disrupted and livelihoods untenable, vulnerable populations may be more likely to leave behind their livelihoods and move in search of assistance - as would any of us - with the unintended consequence of potentially further spreading the virus and possibly encountering heightened social tensions.</li> </ul>



Author	Date	Year	Sources	Title	Summary
Torero Cullen, M.	24/3/20	2020	FAO	<a href="#">Coronavirus Food Supply Chain Under Strain What to do?</a>	<ul style="list-style-type: none"> <li>• Expected problems both on supply and demand side of Food Supply Chains, e.g.: <ul style="list-style-type: none"> <li>○ Food supply chains to be disrupted as of April/May</li> <li>○ Developing countries/Africa: reduction in labour force, affecting labour intensive forms of production (agriculture)</li> <li>○ More perceptible impact on livestock sector</li> <li>○ Transport restrictions and quarantine measures likely to impede farmers' access to input and output markets</li> </ul> </li> <li>• Big problem with exchange rates – good for exporters, bad for importers</li> <li>• Recommendations to meet immediate needs of vulnerable populations: Emergency Food Assistance, nutrition interventions and safety nets enhanced and made more accessible</li> <li>• Social protection Programmes including recommendations based on measures applied in previous crises (Ebola, Food crises, and specific natural risk disaster) as well as selected country examples of SPPs</li> <li>• 'Meet immediate needs of vulnerable populations: Urgent increases in food availability from smallholder farmer food production' – how is COVID-19 affecting smallholders and some country examples of measures taken to help smallholders stabilise production and supply</li> <li>• Meet immediate needs of vulnerable populations: Issues on trade and tax policies</li> </ul>
FAO	28/4/20	2020	FAO	Addressing inequality in times of COVID-19	<ul style="list-style-type: none"> <li>• Lower-income countries, with dramatically fewer financial resources and weaker provision of public health, social protection, sanitation and other public services, particularly in rural areas, will face greater difficulties addressing the health, social and economic consequences of the pandemic.</li> <li>• Within countries, pervasive existing inequalities in access to income, assets, health, education, formal employment, equal opportunity, social protection, internet and public services will magnify the direct and indirect impacts of COVID-19. The most vulnerable includes poorer households and those dependent on informal employment, including casual day labour, seasonal migration or mobile livelihoods; small-scale producers; those without savings and with little recourse to insurance or alternative sources of income. For those with employment, many are low paid workers in essential services and highly exposed to the virus. Inequality within countries and within households is strongly linked to gender.</li> <li>• High-income countries, International Financial Institutions (IFI) and regional economic bodies must mobilize adequate resources in support of lower-income countries in order to avoid similar or worse economic crises with negative long-term implications for agriculture, food security, nutrition, food systems and broader socio-economic development.</li> <li>• Existing inequalities need to be recognized in the public response – explicitly acknowledging the heightened health and economic vulnerabilities of specific socioeconomic groups</li> <li>• Social protection is a crucial immediate intervention.</li> </ul>
FAO	3/20	2020	FAO	<a href="#">Keeping food and agricultural systems alive - Analyses and solutions in a period of crises - COVID-19 Pandemic</a>	<ul style="list-style-type: none"> <li>• Data base of issues affecting food systems and agriculture and emerging policy responses</li> </ul>

Author	Date	Year	Sources	Title	Summary
Torero Cullen, M.	3/20	2020	FAO	<a href="#">A battle plan for ensuring global food supplies during the COVID-19 crisis</a>	<ul style="list-style-type: none"> <li>• Risk to food supply if appropriate measures not put in place</li> <li>• Priority response needs to be bolstering emergency food assistance and safety nets for vulnerable</li> <li>• Poor households need cash to purchase food</li> <li>• Impact of no school feeding programmes</li> <li>• Keeping global food trade open is critical and would help to relax existing restrictions 1/5 of calories are globally traded – LMICS account for 1/3 of food trade</li> <li>• Food supply chains are complex and vulnerable – actions needed to keep them in tact</li> <li>• Protecting the safety of food system workers is critical</li> <li>• ¼ of farm work done by migrant workers so need to expedite visas</li> <li>• E-commerce has potential</li> <li>• Smallholder farmers at disproportionate risk and lockdowns will curb access to markets and inputs – restricting both production and income of farmers – when it is needed most.</li> <li>• Compounded by existing issues in Africa such as locusts</li> <li>• Cash handouts are critical as are waivers on loans</li> <li>• Need to inject cash into agri-food sector to keep it moving</li> <li>• Need to keep fresh food moving – not resort only to non-perishable</li> <li>• Examples of what China did</li> </ul>
Torero Cullen, M.	3/20	2020	FAO	<a href="#">Q&amp;A: COVID-19 pandemic – impact on food and agriculture</a>	<ul style="list-style-type: none"> <li>• We risk a looming food crisis unless measures are taken fast to protect the most vulnerable, keep global food supply chains alive and mitigate the pandemic’s impacts across the food system</li> <li>• Globally enough food but need to expect disruptions</li> <li>• FAO is particularly concerned about the pandemic’s impacts on vulnerable countries already grappling with hunger/hit by other crises</li> <li>• Quarantines and panic during the Ebola Virus Disease outbreak in Sierra Leone (2014-2016), for example, led to a spike in hunger and malnutrition</li> <li>• As of now, disruptions are minimal as food supply has been adequate and markets have been stable so far. Global cereal stocks are at comfortable levels and the outlook for wheat and other major staple crops for 2020 is positive</li> <li>• Disruptions are likely as due to logistical constraints and labour shortage</li> <li>• Policy recommendations <ul style="list-style-type: none"> <li>○ Meet food needs of vulnerable populations</li> <li>○ Boost social protection</li> <li>○ Reduce trade related costs</li> </ul> </li> </ul>
FAO	7/4/20	2020	FAO	<a href="#">Addressing the impacts of COVID-19 in food crises April–December 2020</a>	<ul style="list-style-type: none"> <li>• FAO’s component of the Global COVID-19 Humanitarian Response Plan</li> <li>• As of late March 2020, the full impact of the virus on food security and agricultural food systems is not yet known, nor will likely be known, for months to come as the spread of the virus continues to evolve differently by continent and by country. What is clear is that it will have, and is already having, significant negative effects on people along the food supply chain – from producers to processors, marketers, transporters and consumers</li> </ul>

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					<ul style="list-style-type: none"> <li>• FAO has reviewed its ongoing humanitarian/resilience programming and analysed the potential impacts of the virus in order to ensure continued support to the most vulnerable and anticipatory actions to address the secondary effects of the virus.</li> <li>• Within the Plan, FAO's efforts will focus on four main activities: <ul style="list-style-type: none"> <li>○ Setting up a global data facility – in close collaboration with key partners such as the World Food Programme (WFP), the global Food Security Cluster and the Global Network Against Food Crises Partnership Programme – to support analysis, and inform assessments and programming in contexts already experiencing humanitarian crises (USD 10 million)</li> <li>○ Stabilizing incomes and access to food as well as preserving ongoing livelihood and food production assistance for the most acutely food-insecure populations (USD 60 million)</li> <li>○ Ensuring continuity of the critical food supply chain for the most vulnerable populations, including between rural, peri-urban and urban areas through support to the sustained functioning of local food markets, value chains and systems, focusing on vulnerable smallholder farmers and food workers as well as areas that are critical to the food supply for vulnerable urban areas (USD 30 million)</li> <li>○ Ensuring people along the food supply chain are not at risk of COVID-19 transmission by raising awareness about food safety and health regulations, including rights, roles and responsibilities of workers, together with national authorities and the World Health Organization (WHO) (USD 10 million)</li> </ul> </li> </ul>
FAO/IFAD/ World Bank/WFP	21/4/20	2020	FAO/IFAD/ World Bank/WFP	<a href="#">Joint Statement on COVID-19 Impacts on Food Security and Nutrition</a>	<ul style="list-style-type: none"> <li>• Impacts on the movement of agricultural labor and on the supply of inputs will soon pose critical challenges to food production, thus jeopardizing food security for all people, and hit especially hard people living in the poorest countries.</li> <li>• Impacts on the movement of agricultural labor and on the supply of inputs will soon pose critical challenges to food production, thus jeopardizing food security for all people, and hit especially hard people living in the poorest countries.</li> <li>• As the pandemic slows down economies, access to food will be negatively affected by income reductions and loss of employment as well as availability of food in local markets. Efforts should focus on supporting access to food for the poor and the vulnerable and those whose income is most affected. Implementing adequate social protection measures, such as cash transfers, and investing in early recovery efforts in response to COVID-19 is critical to saving both lives and livelihoods.</li> <li>• Decisive collective action is needed now to ensure that this pandemic does not threaten food security and nutrition, and to improve resilience to future shocks.</li> </ul>
Food Industry Asia	27/3/20	2020	Food Industry Asia	<a href="#">COVID-19 Food &amp; Beverage Impact: Monitoring Update</a>	<ul style="list-style-type: none"> <li>• Update on impact on food industry across Asia</li> <li>• Update on status of COVID-19</li> <li>• No data on large impacts yet – emerging disruption indicated</li> </ul>
Sleet, P.	25/3/20	2020	Future Directions Internationa l	<a href="#">Global Food Insecurity Likely to Increase Due to COVID-19 Pandemic</a>	<ul style="list-style-type: none"> <li>• Concern that food supplies will be disrupted</li> <li>• Exports to China fell significantly in first quarter</li> <li>• Impacts on logistics</li> <li>• In China food prices increased by 21.9% in January and pork jumped by 135.2% food costs at 8 year high</li> </ul>

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					<ul style="list-style-type: none"> <li>The last global recession caused a spike in hunger around the world and forced the poor to limit the diversity of their diets</li> </ul>
G20 Leaders	26/3/20	2020	G20	<a href="#">G20 Leaders' Summit - statement on COVID-19: 26 March 2020</a>	<ul style="list-style-type: none"> <li>"To safeguard the future, we commit to strengthen national, regional, and global capacities to respond to potential infectious disease outbreaks by substantially increasing our epidemic preparedness spending"</li> <li>"We are gravely concerned with the serious risks posed to all countries, particularly developing and least developed countries, and notably in Africa and small island states"</li> <li>"We commit to continue working together to facilitate international trade and coordinate responses in ways that avoid unnecessary interference with international traffic and trade"</li> <li>We also welcome the steps taken by the IMF and the WBG to support countries in need using all instruments to the fullest extent</li> </ul>
G20 Leaders	26/3/20	2020	G20	<a href="#">Extraordinary G20 Leaders' Summit: Statement on COVID-19</a>	<ul style="list-style-type: none"> <li>We are currently undertaking immediate and vigorous measures to support our economies; protect workers, businesses—especially micro-, small and medium-sized enterprises—and the sectors most affected; and shield the vulnerable through adequate social protection. We are injecting over \$5 trillion into the global economy, as part of targeted fiscal policy, economic measures, and guarantee schemes to counteract the social, economic and financial impacts of the pandemic</li> <li>We also welcome the steps taken by the IMF and the WBG to support countries in need using all instruments to the fullest extent as part of a coordinated global response and ask them to regularly update the G20 on the impacts of the pandemic, their response, and policy recommendations. We will continue to address risks of debt vulnerabilities in low-income countries due to the pandemic. We also ask the International Labour Organization (ILO) and the Organisation for Economic Cooperation and Development (OECD) to monitor the pandemic's impact on employment</li> <li>Consistent with the needs of our citizens, we will work to ensure the flow of vital medical supplies, critical agricultural products, and other goods and services across borders, and work to resolve disruptions to the global supply chains, to support the health and well-being of all people</li> <li>We commit to continue working together to facilitate international trade and coordinate responses in ways that avoid unnecessary interference with international traffic and trade. Emergency measures aimed at protecting health will be targeted, proportionate, transparent, and temporary. We task our Trade Ministers to assess the impact of the pandemic on trade</li> <li>We will work swiftly and decisively with the front-line international organizations, notably the WHO, IMF, WBG, and multilateral and regional development banks to deploy a robust, coherent, coordinated, and rapid financial package and to address any gaps in their toolkit. We stand ready to strengthen the global financial safety nets</li> <li>We are gravely concerned with the serious risks posed to all countries, particularly developing and least developed countries, and notably in Africa and small island states, where health systems and economies may be less able to cope with the challenge, as well as the particular risk faced by refugees and displaced persons. We consider that consolidating Africa's health defence is a key for the resilience of global health</li> </ul>
Haddad, L. et al	23/3/20	2020	GAIN	<a href="#">The COVID-19 Crisis and Food Systems: addressing</a>	<ul style="list-style-type: none"> <li>Need to action now to ensure delivery of nutritious food to all</li> <li>Main risks</li> </ul>

Author	Date	Year	Sources	Title	Summary
				<a href="#">threats, creating opportunities</a>	<ul style="list-style-type: none"> <li>○ Increased food prices – especially of nutritious food</li> <li>○ Negative impact on most vulnerable</li> <li>○ Lapses in food safety</li> <li>● Opportunities <ul style="list-style-type: none"> <li>○ Healthier food increases immune systems – case for healthy food</li> <li>○ More awareness about risk of poor diet related diseases that increase vulnerability</li> <li>○ Improved food safety</li> <li>○ Civil society more engaged on food issues</li> <li>○ Greater public and private sector collaboration</li> </ul> </li> <li>● Crisis may lead to increased consumption of poorer nutritional status foods</li> <li>● Fundamental reforms born in times of crisis</li> <li>● <a href="#">Impacts and adaptation table</a> (e.g.) <ul style="list-style-type: none"> <li>○ Increased non-perishable demand reduced overall spending – social protection massive international support</li> <li>○ Disruption to production (many farmers are older by be more severely impacted) – ease credit, extension support, E-support, make food supply essential services</li> <li>○ Disruption to distribution and processing – shared economy systems for transport; E-systems to link producers and retailers;</li> <li>○ Vulnerable loose out in scramble for food, profiteering – prioritise vulnerable, monitoring, improve wet markets</li> <li>○ Policy: immediate health demands deprioritise food supply, regulation relaxed, finance moves to less risky sectors – government action to focus on food system and ensure finance</li> </ul> </li> </ul>
Stella Nordhagen	4/5/20	2020	GAIN	<a href="#">Covid-19 and food prices: what do we know so far?</a>	<ul style="list-style-type: none"> <li>● We examined food price changes (in percentage terms) over the 2.5-month period from 14 February (pre-pandemic) to 30 April. Out of 136 country-food combinations, 118 showed price increases (see graph). The average change was a 6.4% increase in price, with every country showing a price increase for at least eight of the 14 foods examined (apples, bananas, bread, cheese, eggs, lettuce, beef, chicken, onions, oranges, potatoes, milk, rice, and tomatoes). The greatest average price increases were seen in Rwanda (a frightening 23.5%), Tanzania (12%), and Mozambique (10%) and the smallest in Nigeria and Bangladesh (under 2%).</li> <li>● This data leads us to conclude that price increases for many foods in all countries have occurred since the pandemic began. Some of these are minor, but others are considerable and could have a real impact on diet quality</li> </ul>
Guardian	27/3/20	2020	Guardian	<a href="#">Shortage of food looms over COVID-19 lockdown</a>	<ul style="list-style-type: none"> <li>● Analysis of Nigerian situation – food will not flow with a lockdown</li> <li>● Problem of getting inputs</li> <li>● Most people go to market each day to get food – how does a lock down work</li> </ul>
Human Rights Watch	14/4/20	2020	Human Rights Watch	<a href="#">Nigeria: Protect Most Vulnerable in COVID-19 Response</a>	<ul style="list-style-type: none"> <li>● Extended lockdown threatens livelihoods of millions</li> <li>● Nigeria has the biggest economy in Africa, with gross domestic product per capita of \$2,028 in 2018, more than twice that of its neighbors Benin, Chad, or Niger but the economic assistance that the</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<p>government has announced in response to the virus has exposed inadequacies in Nigeria's social protection systems and risks excluding the country's poorest and most vulnerable people</p> <ul style="list-style-type: none"> <li>• The lockdown does not apply to those providing essential services, such as food distributors and retailers, including market stalls selling food and groceries, which the government has said can operate for four hours every 48 hours</li> <li>• The lockdown, however, prevents many Nigerians working in informal sectors from traveling to work or conducting their business</li> <li>• "Millions of Nigerians observing the COVID-19 lockdown lack the food and income that their families need to survive,"</li> </ul>
IFAD	2/4/20	2020	IFAD	<a href="#">Making sure rural communities won't be left behind in the response to COVID-19</a>	<ul style="list-style-type: none"> <li>• It will be the most marginal and poor groups who suffer the most – among them, rural women and young people. School closures and the need to care for sick family members will increase the workloads of many women. Many women will also suffer as unemployment rises, as their current work is more likely to be under informal and precarious working conditions. Similarly, young people, who have greater difficulty than older adults in finding decent jobs, are even more likely to become excluded and disenfranchised.</li> <li>• We have already started repurposing resources wherever possible within our projects to protect the lives and livelihoods of rural people. We are providing immediate needs such as seeds and fertilizer and linking farmers to buyers at a time when movement restrictions are closing down some local markets. And we are working with farmers and microfinance providers to provide flexible options that allow farmers to access and repay loans during the crisis. We are also looking at a major initiative to expand our support to digital platforms servicing rural communities at a time when normal access to information is difficult. And we are adjusting the way we work so we can respond quickly and flexibly.</li> </ul>
IFAD	2020	2020	IFAD	<a href="#">IFAD COVID-19 Response</a>	<ul style="list-style-type: none"> <li>• COVID-19 is a global pandemic that is already having tangible effects on the agriculture sector.</li> <li>• In addition to its potential health effects, COVID-19 threatens to profoundly affect the livelihoods of poor rural farmers who depend on agriculture.</li> <li>• Given that we focus on the poorest of the poor, we fear that the impact of COVID-19 on our beneficiary groups is likely to be especially pronounced.</li> <li>• Investments in rural agricultural programmes can help people become more self-reliant, mitigate the impact of severe events, increase rural prosperity, ensure more sustainable food systems and food security, and create greater resilience in fragile states.</li> <li>• Economic growth in agriculture is two to three times more effective at reducing poverty and food insecurity than growth in other sectors. Investments in small-scale agriculture can help revive food production and create jobs following a crisis and enable rural communities to recover.</li> </ul>
IFAD	4/3/20	2020	IFAD	<a href="#">Fighting against COVID-19: the importance of building long-term resilience in rural communities</a>	<ul style="list-style-type: none"> <li>• Impact of COVID 19 in China</li> <li>• Many households deprived on main source of income</li> <li>• Medical facilities in rural areas</li> <li>• US1.5 billion USD worth of emergency loans by Agricultural Bank of China</li> <li>• Repayment terms extended</li> <li>• Alibaba set up dedicated online agricultural retail platform</li> </ul>



Author	Date	Year	Sources	Title	Summary
					<ul style="list-style-type: none"> <li>• “green” and “quick” food supply channels being set up</li> <li>• Need to invest in resilience of rural communities</li> </ul>
Esha Singh , Meera Mishra	6/5/20	2020	IFAD	<a href="#">When they came home: Migration and responses to COVID-19 in India</a>	<ul style="list-style-type: none"> <li>• The International Labour Organization estimates that about 2.7 billion people – 81 per cent of the global workforce – are currently affected by full or partial workplace closures</li> <li>• The evidence of many local community organisations supporting returning migrant workers who are in distress</li> </ul>
Marie Haga	6/5/20	2020	IFAD	<a href="#">Small-scale farmers can help build resilient food systems in a post-COVID-19 world</a>	<ul style="list-style-type: none"> <li>• Although they grow their own food, many of the worst-off farmers have inadequate access to inputs and assets, and as a result get by with a restricted diet that barely meets family needs. For those who regularly produce surpluses, poor information and bargaining power often limit the profits they are able to generate – and reduced income, in turn, makes it harder to diversify and improve their diets. This leaves them and other rural people particularly vulnerable to shocks, including the impacts of the present pandemic.</li> <li>• In rural areas of developing countries, where most of the world’s poorest and hungriest people are. These small producers are thus the most important source of food in contexts where the need is greatest. They mostly serve domestic markets, making them especially important at times when trade is compromised. In particular, their intimate involvement in markets at the local level means they are well-placed to continue the supply of food in situations where the COVID-19 crisis has created complex logistical and transport issues.</li> <li>• As the COVID-19 pandemic continues to damage global health and the world’s economies, it is crucial that we prevent it from plunging millions more people into hunger. Small-scale farmers can help us do this – if we work with them and invest in their activities. Resilient farmers are key for a resilient food system. And they are an indispensable part of a brighter post-COVID-19 world.</li> </ul>
Savastano, S.	9/4/20	2020	IFAD	<a href="#">Shaping a holistic response to COVID-19: Protecting food systems and rural producers</a>	<ul style="list-style-type: none"> <li>• It is essential that all interventions must be holistic in design One possible approach would combine agricultural and social protection support to address short-term needs as well as speed up medium- to long-term recovery. Central to this approach would be agrifood systems. With their ability to connect rural and urban areas and to create employment all along the value chain, they are invaluable to any recovery effort. Three elements would be key: <ul style="list-style-type: none"> <li>○ Identification: of a digital roster of priority investment needs,</li> <li>○ Support: targeted mobile transfers and other financial instruments to address constraints on food supply, market access or other system components..</li> <li>○ Connection: ensuring rural market connectivity for improving the sustainability of the impacts of the other interventions.</li> </ul> </li> </ul>
Buckholtz, A.	3/20	2020	IFC	<a href="#">Ebola-era Lessons for the Private Sector</a>	<ul style="list-style-type: none"> <li>• Interview with Stefan Dercon</li> <li>• Need to closely monitor what is occurring in the economy – e.g. farmer not affected in way assumed but bigger impact on rural enterprises</li> <li>• Avoid “grand gestures” and focus on where there are bottle necks in the private sector</li> <li>• Need good data</li> <li>• Liquidity needed for financial system</li> <li>• Support internet based services</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<ul style="list-style-type: none"> <li>• Need better integration of public and private for derisking innovation</li> <li>• Firms in emerging economies are often quite resilient due to great challenges than Western firms face</li> <li>• Reduced investment into emerging economies will have negative impact</li> </ul>
Vos, R., Martin W., Labourde D.		2020	IFPRI	<a href="#">How much will global poverty increase because of COVID-19</a>	<ul style="list-style-type: none"> <li>• Economic forecasters project global growth could be cut in half in 2020, to 1.5% from an earlier forecast of 3%</li> <li>• This translates to estimated increase of in poverty (and associated food insecurity) of 2% and possibly more – increase of 14 million – impact from: <ul style="list-style-type: none"> <li>○ Labour productivity shock</li> <li>○ Total factor productivity shock</li> <li>○ Trade shock</li> </ul> </li> </ul>
Swinnen, J.	10/4/20	2020	IFPRI	<a href="#">Will COVID-19 cause another food crisis? An early review</a>	<ul style="list-style-type: none"> <li>• A food price and security crisis similar to 2008/09 is unlikely in the current circumstances. However poor groups who have lost jobs and income are likely to suffer a food crisis while those with more resources will be cushioned.</li> <li>• Economic models predict that under current conditions—relatively high food stocks, good harvests, low oil prices, and declining demand—global food prices are not going to rise.</li> <li>• Logistical problem will disrupt supply of some food products in some areas will cause shortages and prices rises.</li> <li>• Hoarding behaviour by consumers and governments may be the greatest risk</li> </ul>
Tamru,S., Hirvonen,K., Minten, B.,	13/4/20	2020	IFPRI	<a href="#">Impacts of the COVID-19 crisis on vegetable value chains in Ethiopia</a>	<ul style="list-style-type: none"> <li>• Urban consumption of fruits and vegetables is declining, trade is affected by travel bans and reduced competition, and farmers face lower prices and reduced access to inputs</li> <li>• Effects downstream and midstream in the vegetable value chain: Vegetable trade and consumption are reduced; Urban retail prices are not significantly affected so far</li> <li>• Effects on farmers: Producer prices for vegetables are on the decline; Farm losses seem to be increasing; There is shortage of farm inputs and their prices are increasing; Labor is becoming scarce</li> <li>• Interviews with vegetable production stakeholders have a number of potential policy implications: (i) there is a need for widespread and effective information campaigns. (ii) reduce the need of travel, enhanced trading through smartphones, virtual purchasing, and e-payments could be considered so that only truck drivers pickup loads would need to travel; (iii) To avoid further disruptions to food supply, ensuring the availability of agricultural inputs to farmers at low prices, and assuring incentives for production, should be a priority for the government in the next few months</li> </ul>
David Laborde, Will Martin And Rob Vos	16/3/20	2020	IFPRI	<a href="#">Poverty and food insecurity could grow dramatically as COVID-19 spreads</a>	<ul style="list-style-type: none"> <li>• Over 140 million additional people could fall into extreme poverty in 2020, including 80 million in Africa and 42 million in South Asia</li> <li>• Food insecurity would rise along with poverty. Without support, this global health crisis could thus cause a major poverty and food crisis</li> <li>• For developing countries as a group, the economic fallout would lead to a decline of their aggregate GDP of 3.6%, but economies in Africa south of the Sahara, Southeast Asia and Latin America would be hit much harder due to their relatively high dependence on trade and primary commodity exports.</li> </ul>

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					<ul style="list-style-type: none"> <li>• For developing countries as a group, the economic fallout would lead to a decline of their aggregate GDP of 3.6%, but economies in Africa south of the Sahara, Southeast Asia and Latin America would be hit much harder due to their relatively high dependence on trade and primary commodity exports.</li> <li>• Heading off this dire outcome—a potential massive increase in global poverty and hunger—calls for an unprecedented policy response. High-income countries and international organizations should work to provide low- and middle-income countries with the necessary fiscal space and import capacity to expand health and social protection programs, strengthen food supply chains, and ensure adequate and affordable food supplies. Honoring the multiple calls for official and commercial debt relief would also help.</li> </ul>
Reardon, T., Bellemare, M. F., Zilberman, D.	2/4/20	2020	IFPRI	<a href="#">How COVID-19 may disrupt food supply chains in developing countries</a>	<ul style="list-style-type: none"> <li>• The organisation of food supply chains (FSCs) is strongly affected by the level of economic development and factors such as urbanization and globalization. COVID-19 will thus have different impacts on FSCs in poor vs. in rich countries. The authors identify these structural differences and draw out the implications of widespread lockdowns and possible policy responses</li> <li>• The article lists 7 hypotheses, based on what we know so far, about the likely effects of COVID-19 on FSCs in developing regions</li> <li>• Implications, strategies, policies: The general strategy must be two-pronged: Implement robust public health measures to slow the spread of disease; and address food security impacts, particularly the potentially enormous effects on income and employment. Addressing the FSC issues will require three complementary policy paths:                         <ul style="list-style-type: none"> <li>○ In the short run, implement new, broad safety nets for SMEs and workers in the midstream and downstream segments of FSCs;</li> <li>○ In the short and medium term, monitor and regulate wholesale markets, retail wet markets, and processing clusters more strictly, and redesign their sites for improved health practices;</li> <li>○ Finally, make long-term investments to help SMEs change hygiene practices and better site design that will help them remain competitive.</li> </ul> </li> </ul>
Zhang, X.	26/3/20	2020	IFPRI	<a href="#">Chinese livestock farms struggle under COVID-19 restrictions</a>	<ul style="list-style-type: none"> <li>• Lockdowns in China had a significant but not well understood impact on agriculture sector</li> <li>• Animal production is short cycle and depends on feed supply</li> <li>• In China still have effect of swine fever</li> <li>• Timing for new season planting is critical and inputs must be available and on time</li> <li>• 75% of agricultural business had not resumed operation on 10 Feb</li> <li>• Main issue is logistics disruption</li> <li>• Shortages of feed reported</li> <li>• Bees died due to travel restrictions – no pollination – bee farmer committed suicide</li> <li>• Chinese green channel for feed</li> <li>• Need to get rural enterprises back to work</li> </ul>
Glauber, J. et al	27/3/20	2020	IFPRI	<a href="#">COVID-19: Trade restrictions are worst</a>	<ul style="list-style-type: none"> <li>• Fears to global food supply should be taken seriously but not overstated</li> <li>• Global stocks are high and markets well supplied with good outlook for 2020 harvest.</li> </ul>

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				<a href="#">possible response to safeguard food security</a>	<ul style="list-style-type: none"> <li>• Fresh fruits and vegetables may be more affected due to complex supply chains</li> <li>• Stocks are higher than 2008/9 food prices crisis</li> <li>• In addition China has 10-13 months of rice and wheat for domestic consumption</li> <li>• Critical factor will be that markets are kept open and there should be agreement to such an approach</li> <li>• Hover some signs of restricting trade already, Vietnam, Kazakhstan</li> <li>• Much large scale cereal production and distribution should not be badly affected due to bulk and low human contact mechanisation</li> <li>• Global Staple food prices are currently stable</li> <li>• Policy needs to focus on fiscal stimulus, social protection and health</li> </ul>
Lawrence Haddad	28/4/20	2020	IFPRI	<a href="#">Biblical, on steroids, and across generations: The coming food and nutrition crash can be averted if we act now to counter the COVID-19 crisis</a>	<ul style="list-style-type: none"> <li>• Biblical, on steroids, and across generations: The coming food and nutrition crash can be averted if we act now to counter the COVID-19 crisis</li> <li>• Biblical, on steroids, and across generations: The coming food and nutrition crash can be averted if we act now to counter the COVID-19 crisis</li> <li>• Just like dealing with the virus, early action is vital. Stop malnutrition from gaining a malevolent hold of children's lives before irreversible damage is done. It is a true no-regrets act because the benefit-cost ratio of scaling up nutrition programs is 16:1</li> <li>• Maintain coverage rates of essential nutrition programs—and increase them. Coverage rates of essential programs that we know are cost effective are shockingly low: 20%-30% of the children, girls and women who need them get them</li> <li>• Keep the supply of nutritious food moving—and expand the flow.</li> </ul>
Manuel Hernandez, Soonho Kim, Brendan Rice And Rob Vos	5/5/20	2020	IFPRI	<a href="#">IFPRI's new COVID-19 Food Price Monitor tracks warning signs of stress in local markets</a>	<ul style="list-style-type: none"> <li>• Daily price data in multiple countries and markets are needed to provide information to identify and respond to more specific local and national shocks—and a new Food Price Tracker tool is now available to meet this demand</li> <li>• The Monitor is already raising a number of these red flags. In nearly all markets in India, potato prices have increased by more than 15% from pre-COVID levels. In Uganda, prices of most key foods have increased by more than 15% since mid-March</li> <li>• Since the COVID-19 outbreak, global markets for staples including wheat, maize, rice, and soybeans have remained relatively stable.</li> </ul>
IFPRI	7/5/20	2020	IFPRI	<a href="#">Covid-19 Food Price Monitor</a>	<ul style="list-style-type: none"> <li>• The Food Security Portal's COVID-19 Food Price Monitor serves as a temperature check of market conditions for staple and non-staple foods at the local level for South Asia and Sub-Saharan Africa</li> </ul>
Derek Headey And Marie Ruel	23/4/20	2020	IFPRI Blog	<a href="#">The COVID-19 nutrition crisis: What to expect and how to protect</a>	<ul style="list-style-type: none"> <li>• The COVID-19 pandemic has all the makings of a perfect storm for global malnutrition</li> <li>• We can expect a dangerous decline in dietary quality in low- and middle-income countries (LMICs) stemming from the income losses related to government-mandated shutdowns and de-globalization, as well as from the freezing of food transfer schemes such as school feeding programs and the breakdown of food markets due to both demand shocks and supply constraints.</li> <li>• In poor countries calories from nutrient-rich, non-staple foods like eggs, fruits, and vegetables are often as much as 10 times more expensive than calories from rice, maize, wheat, or cassava. In the face of</li> </ul>

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					<p>drastic declines in income, vulnerable households will quickly give up nutrient-rich foods in order to preserve their caloric intake.</p> <ul style="list-style-type: none"> <li>• More indirect, yet equally severe, is the risk that diversion of healthcare resources toward combating COVID-19 will jeopardize regular but life-saving efforts to prevent and treat malaria, diarrhea, and other infectious and tropical diseases.</li> <li>• Key actions: keep food systems functioning; create food system innovations for delivery; promote home food production; promote and stimulate nutrient rich food consumption; orientate safety nets to nutritional outcomes; ensure health services don't collapse; invest in WASH; support community based nutrition programs; protect women and children; scale up nutrition surveillance.</li> </ul>
IMF/WBG	4/3/20	2020	IMF/WBG	<a href="#">Joint Press Conference on Covid-19 by IMF Managing Director and World Bank Group President</a>	<ul style="list-style-type: none"> <li>• The recommended areas of fiscal measures are those that are well-targeted to address the supply and demand shocks. They are around funding social protection expenditures: making sure that people, who stay home because schools are closed, they can have income to support their families; that there is credit available for small and medium sized enterprises; that there is a restructuring of debt service temporarily---in other words, giving a couple of months---especially for companies in the sectors and the physical area, the geographic areas, most impacted.</li> <li>• Two core things: it's a \$12-billion package, of which \$6 billion is IBRD and IDA, and that enables and allows special protection for poor countries. And then there's also \$6 billion from the International Finance Corporation.</li> <li>• What we know is, that the amount of frozen capital in the world has gone up substantially. And so, what we're trying to do from the World Bank side is unlock that capital and allow it to continue into working capital.</li> <li>• As far as lessons learned, it's early. One thing we know is in previous crises the World Bank was involved and did an extensive evaluation of what tools worked. We're drawing on that in creating the response to this current crisis. What we know is information is critical during the crisis, and information systems, and then there is the need for countries to prepare themselves for disasters</li> <li>• One of the most powerful things countries can do, almost around the world, is take actual actions to improve their policies, so that the prospective growth rate for their countries can be faster. Rather than think of it as a temporary stimulus, think of it as an investment by the world in growth.</li> <li>• We have done a quick assessment of countries at highest risks because of combination of four factors: weak health systems; exposure to price shocks because of commodity export orientation; vulnerability, due to spill over impacts from other countries; and limited fiscal space. It is, unfortunately clear from this analysis that Sub-Saharan Africa presents a particularly important area of focus. We do have up to \$10 billion available for low income countries to tap in with zero interest rates, and, obviously, we would prioritize countries, especially countries in Africa that have already been faced with difficulties. Some of them are program countries of the Fund, today, and we have a trust fund that allows for the lowest income countries to pay their obligations to the IMF. So, they can use this fiscal space to fund priority investments.</li> </ul>

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Mukherjee, S.	25/3/20	2020	India Business Standard	<a href="#">Rural sector stressed as Covid-19 disrupts supplies, spikes unemployment</a>	<ul style="list-style-type: none"> <li>• Early report of lack of labour for harvesting and distribution and shops selling agricultural inputs closed.</li> <li>• Prices for potatoes dropping</li> <li>• Large numbers of urban workers returning to rural areas</li> <li>• Machinery operators not working</li> <li>• Rumours about virus being spread through meat and eggs impacting on demand</li> </ul>
Brzeski, C., Smith, J.	2/4/20	2020	ING	<a href="#">Four scenarios for the global economy after Covid-19</a>	<ul style="list-style-type: none"> <li>• The authors mapped out the hit to the global economy and possible path for recovery under four different coronavirus scenarios: <ul style="list-style-type: none"> <li>○ Scenario 1: Our base case (It assumes that the lockdowns eventually manage to flatten the curve, although not entirely)</li> <li>○ Scenario 2: Winter lockdowns return (This is a slight variation of base case scenario. It starts off in much the same way, with a gradual easing of lockdown measures in May and June. However, in this scenario, the virus returns in the autumn and despite more widespread testing efforts and contact tracing, the new spread pushes most economies back into lockdown)</li> <li>○ Scenario 3: The 'best' case (In 'best' case scenario, the Western world follows in the footsteps of China by ending the lockdowns as soon as the curve of new infections has been flattened. A quick return to normality is assumed to materialise towards the end of April. This scenario also assumes that the virus doesn't come back again in the winter)</li> <li>○ Scenario 4: The 'worst' case (lockdown measures last until the end of the year, assuming that things return to normal from 2Q21, perhaps if a vaccine is developed and able to be deployed over the winter months)</li> </ul> </li> </ul>
Khan, D., Khan, L.Y.	1/4/20	2020	Inter Press Service News Agency	<a href="#">The Economic Impact of COVID-19 on Developing Countries</a>	<ul style="list-style-type: none"> <li>• In the short term there is likely to be a sharp drop in domestic consumer demand in most developing countries</li> <li>• Demand for food, medical assistance and other essential items may rise, but this would be more than offset by lower demand for non-essential goods</li> <li>• For countries with large numbers of overseas workers such as Philippines, India and Pakistan, or with large diasporas such as Somalia, remittances would slow down due to layoffs and delayed salary payments in Europe, the Middle-East and USA</li> <li>• On the supply side, there are also likely to be disruptions in developing countries, as there may be shortages of imported raw materials and spare parts</li> <li>• Many developing countries do not have Government run social safety nets</li> <li>• To complement private initiatives, the Government will need to mobilize its own institutional machinery, particularly those with presence in rural areas. However, with Government struggling to meet rising medical care expenses, their financial capacity is likely to be severely limited. International organizations should be mobilized to help</li> <li>• It is worth mentioning that the World Bank has set aside US\$12 billion, the Asian Development Bank US\$6.5 billion and the IMF US\$50 billion for the helping countries with COVID-19</li> </ul>

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IPES-Food	3/20	2020	IPES-Food	<a href="#">COVID-19 and the crisis in food systems: Symptoms, causes, and potential solutions Communiqué by, April 2020</a>	<ul style="list-style-type: none"> <li>• The COVID-19 crisis has shone a spotlight on the vulnerabilities of food systems on three fronts: habitate loss that creates conditions for viruses to emerge and spread; underlying vulnerability of food systems; large number of people who live in or on verge of hunger and are highly vulnerable.</li> <li>• Crisis offers opportunities to rethink food systems</li> <li>• Four key recommendations: <ul style="list-style-type: none"> <li>○ Taking immediate action to protect the most vulnerable</li> <li>○ Building resilient agroecological food syste</li> <li>○ Rebalancing economic power for the public good: a new pact between state and society</li> <li>○ Reforming international food systems governance</li> </ul> </li> </ul>
Japan Times	30/1/20	2020	Japan Times	<a href="#">China steps up 'green channel' to supply food for locked-down, virus-hit Wuhan</a>	<ul style="list-style-type: none"> <li>• Green channel of food supply set up to supply Wuhan by authorities</li> </ul>
Lancet		2020	Lancet	<a href="#">COVID-19: the gendered impacts of the outbreak</a>	<ul style="list-style-type: none"> <li>• If the response to disease outbreaks such as COVID-19 is to be effective and not reproduce or perpetuate gender and health inequities, it is important that gender norms, roles, and relations that influence women's and men's differential vulnerability to infection, exposure to pathogens, and treatment received, as well as how these may differ among different groups of women and men, are considered and addressed</li> </ul>
Craven, M. et al	30/3/20	2020	McKinsey & Company	<a href="#">COVID-19: Implications for business March 2020   Executive Briefing</a>	<ul style="list-style-type: none"> <li>• Latest insights, starting with five likely epidemiologic swing factors that will largely determine the contours of the pandemic in the next year</li> <li>• Epidemiological swing factors for COVID-19</li> <li>• Summary of two new articles designed to help senior executives lead through the crisis: <ul style="list-style-type: none"> <li>○ Beyond coronavirus: The path to the next normal - outlining five time frames to help leaders organize their thinking and responses</li> <li>○ Safeguarding our lives and our livelihoods: The imperative of our time - explaining how business and society can and must take on both spheres of action, right away</li> </ul> </li> </ul>
Jayaram, K., Leke, A., Ooko-Ombaka, A., Sunny Sun, Y.	4/20	2020	McKinsey & Company	<a href="#">Tackling COVID-19 in Africa</a>	<ul style="list-style-type: none"> <li>• GDP growth cut form 3 to 8 percent</li> <li>• Compounded by oil-price shock</li> <li>• Tip Africa into economic contraction without major fiscal stimulus</li> <li>• Governments, the private sector, and development institutions need to double down on their already proven resolve—and expand existing efforts to safeguard economies and livelihoods across Africa</li> <li>• Africa is likely to experience delayed or reduced foreign direct investment (FDI) as partners from other continents redirect capital locally</li> </ul>
Nyaaba, C., Dinko, H.	25/3/20	2020	MyJoyonlin e	<a href="#">Food crisis could hit Ghana in the aftermath of coronavirus pandemic</a>	<ul style="list-style-type: none"> <li>• The long-term implications of Covid-19 on food security and measures to increase food production is missing</li> <li>• ¼ of African population classified by FAO as food insecure</li> </ul>



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					<ul style="list-style-type: none"> <li>• For Africa food supply is largely smallholder</li> <li>• Hitting at beginning of farming season with longer term impacts</li> <li>• 70% of rice and 75% of chicken is imported into Ghana – need to boost domestic production</li> <li>• Need to ensure continuity of transport logistics</li> <li>• Need emergency funds to keep smallholders producing</li> <li>• Classify agricultural inputs as essential materials to ensure their supply</li> <li>• Need to control prices</li> <li>• Following 23<sup>rd</sup> March prices in Accra tripled</li> </ul>
Nutrition Connect		2020	Nutrition Connect	<a href="#">Blog series: Opportunities for building back better food systems and nutrition in the wake of COVID-19</a>	<ul style="list-style-type: none"> <li>• The COVID-19 Crisis and Food Systems: Addressing threats, creating opportunities</li> <li>• COVID-19 and food supply: A four-pronged battle plan for countries</li> <li>• Ensuring that hunger does not kill more people than COVID-19 in Africa</li> <li>• Social bridging matters as much as social distancing during these challenging times</li> <li>• Human and planetary health are connected</li> <li>• Healthy diets for human resilience in the age of COVID-19</li> <li>• Hidden Hunger and the COVID-19 pandemic</li> </ul>
OECD	3/20	2020	OECD	<a href="#">OECD Economic Outlook, Interim Report March 2020</a>	<ul style="list-style-type: none"> <li>• Severe, short-lived downturn in China, where GDP growth falls below 5% in 2020 after 6.1% in 2019, but recovering to 6.4% in 2021</li> <li>• In Japan, Korea, Australia, growth also hit hard then gradual recovery</li> <li>• Impact less severe in other economies but still hit by drop in confidence and supply chain disruption</li> <li>• Severe, short-lived downturn in China, where GDP growth falls below 5% in 2020 after 6.1% in 2019, but recovering to 6.4% in 2021</li> <li>• In Japan, Korea, Australia, growth also hit hard then gradual recovery</li> <li>• Impact less severe in other economies but still hit by drop in confidence and supply chain disruption</li> <li>• Governments must act now: <ul style="list-style-type: none"> <li>○ Help health care sector, affected industries and workers, boost investment to accelerate recovery</li> <li>○ If epidemic spreads, coordinate international action</li> <li>○ Protect the most vulnerable health and income; buffer the shock through tax and credit change easing and flexible working</li> </ul> </li> </ul>
Oxfam	9/04/20	2020	Oxfam	<a href="#">DIGNITY NOT DESTITUTION An 'Economic Rescue Plan For All' to tackle the Coronavirus crisis and rebuild a more equal world</a>	<ul style="list-style-type: none"> <li>• New analysis shows the economic crisis caused by coronavirus could push over half a billion people into poverty unless urgent and dramatic action is taken</li> <li>• Developing countries must act to protect their people, and demand action from rich nations to support them</li> <li>• Rich country governments must massively upscale their help – led by the G20</li> <li>• This paper lays out an Economic Rescue Plan For All that meets the scale of the crisis, mobilizing at least \$2.5 trillion dollars to tackle the pandemic and prevent global economic collapse</li> <li>• It prioritizes helping people directly: giving cash grants to all who need them. An immediate suspension of the debt payments of poor countries, combined with a one-off economic stimulus by the IMF and an increase in aid and taxes, can pay for this</li> </ul>

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Poppick, L.	1/4/20	2020	Scientific American	<a href="https://www.scientificamerican.com/article/the-effects-of-covid-19-will-ripple-through-food-systems/">https://www.scientificamerican.com/article/the-effects-of-covid-19-will-ripple-through-food-systems/</a>	<ul style="list-style-type: none"> <li>• Though the extent of the blow to U.S. food production is unclear—and will depend on how long the pandemic and countermeasures last—widespread food shortages are unlikely anytime soon</li> <li>• Many U.S. farmers producing staple crops, including wheat and rice, do so with mechanized tools that already limit human-to-human contact and fall within the Centres for Disease Control and Prevention guidelines for limiting the spread of the coronavirus.</li> <li>• COVID-19 does not currently pose major threats to overall global food security because adequate stores of staples remain available</li> <li>• Higher-value and more specialized crops face a greater number of hurdles, these foods—such as some fruits and organic produce grown by smaller-scale farms—generally require more labour. Even if these farmers are able to continue working, they may have limited places to sell their goods</li> <li>• As COVID-19 leads to widespread income losses, fewer consumers may be able to afford specialized or high-value products, including organic vegetables</li> </ul>
Socialprotection.org	2020	2020	Socialprotection.org	<a href="#">Social protection responses to COVID-19 Webinar Series</a>	<ul style="list-style-type: none"> <li>• Series of webinars with powerpoints discussing social protections strategic for COVID-19 response</li> </ul>
Duffin, E.	3/4/20	2020	Statista	<a href="#">Impact of the coronavirus pandemic on the global economy - Statistics &amp; Facts</a>	<p>Detailed statistics on the topics of:</p> <ul style="list-style-type: none"> <li>• Global economic impact</li> <li>• Stock markets and COVID-19</li> <li>• Impact on major industries</li> <li>• Impact on Asia</li> <li>• Impact on Europe</li> <li>• Impact on the United States</li> </ul>
Driscoll, Mark	6/5/20	2020	Tasting the Future	<a href="#">Sustainable Healthy Diets and Covid 19: Building Back Better Food Systems</a>	<ul style="list-style-type: none"> <li>• Covid-19 must be a wake-up call. A call to take a different path and place human and ecological health at the heart of a new, green economic system. I think there is a real opportunity to build back better food systems and to turn a crisis into an opportunity – reconnecting people with food through place, placing healthy sustainable and culturally relevant diets at the heart of the policy and practice response to build new resilient, ‘one health’ food systems.</li> <li>• Three strategies: re-localisation; increase diversity of food production and consumption (globally, we now rely on just 6-8 crops to supply 70% of our calories)</li> </ul>
Choularton, R., Mallory, M.	02/04/20	2020	Tetra Tech for Devex	<a href="#">Opinion: How to address the impact of COVID-19 on global food systems</a>	<ul style="list-style-type: none"> <li>• According to the Brookings Institution, COVID-19 could result in a global loss of \$2.4 trillion to over \$9 trillion in gross domestic product this year alone. And according to the World Bank, agriculture accounted for one-third of global gross domestic product as of 2014, while the Food and Agriculture Organization has estimated that 60% of the world’s people depend on agriculture for their livelihoods.</li> <li>• Though the global scope of COVID-19 presents a unique set of challenges, we can learn important lessons from previous outbreaks and their impacts on agriculture and food systems</li> <li>• In Liberia, rice prices increased by more than 30%, while cassava prices rose 150%. In the wake of COVID-19, food prices in China have increased by 20%, trade restrictions have been imposed by countries that include major exporters of wheat and rice — Kazakhstan and Vietnam — and agricultural labour migrations have been disrupted</li> </ul>

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					<ul style="list-style-type: none"> <li>• The International Food Policy Research Institute's early projections indicate that even under an effective COVID-19 containment scenario, 14 million to 22 million people could slip into extreme poverty and low- and middle-income countries could see a 25% decline in agri-food exports</li> <li>• While it will take time to fully understand the scope of COVID-19's impact on food and agricultural systems, here are a number of actions that the development community can start to take now: <ul style="list-style-type: none"> <li>○ Increase assessments of the impacts of COVID-19 on agriculture and food systems</li> <li>○ Support farmers to continue producing and marketing food</li> <li>○ Accelerate the deployment of relevant agricultural technologies and digital agriculture solutions</li> <li>○ Support small, medium, and large agribusinesses</li> <li>○ Innovate in supply chains and markets</li> <li>○ Support regional policy dialogues to help countries address food shortages</li> <li>○ Assess the impact of COVID-19 on agriculture-based livelihoods and food security using a gender lens</li> </ul> </li> </ul>
Stratfor Worldview	4/4/20	2020	The National Interest	<a href="#">How the Coronavirus Has Damaged Global Food Supply Chains</a>	<ul style="list-style-type: none"> <li>• The pandemic is also affecting the global food market as more countries move to shore up their domestic supplies</li> <li>• The attempts by food importers to increase their reserves, and by food exporters to limit the outflow, have already affected prices of core food stocks such as wheat and rice</li> <li>• China, for example, currently holds over half of the 287.1 million tons of the world's wheat reserves</li> <li>• Localized misalignments of supply and demand still carry risk in other areas of the world</li> <li>• Vietnam has continued to export rice but has temporarily suspended the awarding of new export licenses since March 24</li> <li>• Russia has temporarily suspended all grain exports since March 23 and also falls under a Eurasian Economic Commission (EAEU)-wide ban on cereal grain exports from April 10 until June 30</li> <li>• For particularly weak countries, like Zimbabwe, that has limited financial reserves and pre-existing food security challenges, and already struggles to meet food demands under normal conditions. Price increases and restrictions on supply could rapidly lead to severe shortages there.</li> <li>• In a worst-case scenario in which a prolonged disruption if the spread of the virus were to continue unabated into the harvesting seasons of the larger exporters, major misalignments of supply, demand and transport capacity could result in significant shortages across import-dependent states</li> <li>• In all likelihood, however, disruptions will remain limited in the event that the crisis lasts several months, and global supply stress will mostly express itself through rising costs of food products.</li> </ul>
Ivanic, M. Martin, W.J.	1/4/08	2008	The World Bank Group	<a href="#">Implications of Higher Global Food Prices for Poverty in Low-Income Countries</a>	<ul style="list-style-type: none"> <li>• In many poor countries, the recent increases in prices of staple foods raise the real incomes of those selling food, many of whom are relatively poor, while hurting net food consumers, many of whom are also relatively poor</li> <li>• The impacts on poverty will certainly be very diverse, but the average impact on poverty depends upon the balance between these two effects, and can only be determined by looking at real-world data</li> <li>• The recent large increases in food prices appear likely to raise overall poverty in low income countries substantially</li> </ul>

Author	Date	Year	Sources	Title	Summary
Secretary-General António Guterres		2020	UN	<a href="https://www.un.org/en/coronavirus/un-secretary-general">https://www.un.org/en/coronavirus/un-secretary-general</a>	<ul style="list-style-type: none"> <li>• COVID-19 response from the Secretary General including regular statements and communications to Member States</li> </ul>
United Nations	3/20	2020	United Nations	<a href="#">Shared Responsibility, Global Solidarity: Responding To The Socio-Economic Impacts Of Covid-19</a>	<ul style="list-style-type: none"> <li>• Unprecedented crisis in recent history – attacking societies at their core</li> <li>• Need a massive coordinated health response to suppress transmission</li> <li>• A large-scale, coordinated and comprehensive multilateral response amounting to at least 10 per cent of global GDP is needed</li> <li>• the COVID-19 crisis risks reversing decades of progress in the fight against poverty and exacerbating already high levels of inequality within and between countries</li> </ul> <p>Key Measures – Global</p> <ul style="list-style-type: none"> <li>• Advocate and support implementation of a human-centred, innovative and coordinated stimulus package reaching double-digit percentage points of the world’s gross domestic product</li> <li>• Resist the temptation to resort to protectionist measures</li> <li>• Take explicit measures to boost the economies of developing countries</li> <li>• Strengthen international public finance provision</li> <li>• Waive sanctions in this time of solidarity</li> </ul> <p>Key Measures -Regional</p> <ul style="list-style-type: none"> <li>• Adopt “Do No Harm” trade policies, preserve connectivity, and ensure regional monetary-fiscal coordination</li> <li>• Engage with private financial sector to support businesses</li> <li>• Address structural challenges and strengthen normative frameworks to deal with transboundary risks</li> </ul> <p>Key Measures -National</p> <ul style="list-style-type: none"> <li>• Undertake fiscal stimulus and support for the most vulnerable</li> <li>• Protect Human Rights and focus on inclusion</li> <li>• Support to SMEs</li> <li>• Support decent work</li> <li>• Support education</li> <li>• Prioritize social cohesion measures</li> </ul>
UNSCN	14/04/20	2020	UNSCN	<a href="#">The COVID-19 pandemic is disrupting people’s food environments: a resource list on Food Systems and Nutrition responses</a>	<ul style="list-style-type: none"> <li>• Contributing to coronavirus pandemic response, the UNSCN has compiled a list of available resources and key readings with focus on nutrition and food systems. This list will be continually updated as more resources become available</li> </ul>
Sumner, A., Hoy, C.,	10/4/20	2020	UNU-WIDER	<a href="#">Working Paper</a>	<ul style="list-style-type: none"> <li>• Estimates of the potential short-term economic impact of COVID-19 on global monetary poverty through contractions in per capita household income or consumption</li> </ul>

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Ortiz-Juarez, E.				<a href="#">Estimates of the impact of COVID-19 on global poverty</a>	<ul style="list-style-type: none"> <li>Estimates are based on three scenarios: low, medium, and high global contractions of 5, 10, and 20 per cent; the impact of each of these scenarios on the poverty headcount is calculated using the international poverty lines of US\$1.90, US\$3.20 and US\$5.50 per day</li> <li>Estimates show that COVID poses a real challenge to the UN Sustainable Development Goal of ending poverty by 2030 because global poverty could increase for the first time since 1990 and, depending on the poverty line, such increase could represent a reversal of approximately a decade in the world's progress in reducing poverty</li> <li>In some regions the adverse impacts could result in poverty levels similar to those recorded 30 years ago. Under the most extreme scenario of a 20 per cent income or consumption contraction, the number of people living in poverty could increase by 420–580 million, relative to the latest official recorded figures for 2018</li> </ul>
Hall, B.	12/3/20	2020	USAID	<a href="#">Coronavirus and the Implications for Food Systems and Policy</a>	<ul style="list-style-type: none"> <li>Still hard to know scale of impact – but lessons from Ebola in West Africa</li> <li>Liberia study showed reduction in household income across the board not just in affected areas</li> <li>Community incidence of EVD negatively affected crop production</li> <li>Sierra Leone had system wide impacts on food security and nutrition on a scale equivalent to impact of natural disasters, with restricted movement affecting supply chains</li> <li>28/20 EVD outbreak in Congo disrupted food supply and humanitarian assistance and led to increased violence</li> <li>China food prices up by 20% from last year due to COVID-19</li> <li>China has coped by using supply from other areas through “green channels”</li> <li>Pandemic are far more likely to adversely affect the poor and other marginalized groups with less power and resources to adapt to unpredictable crisis events</li> <li>Poor depend on food system stability for livelihoods</li> <li>Increased food prices disproportionately affect the poor</li> <li>People forced to work due to no other income exacerbating the pandemic</li> <li>Need sound food security and agriculture policy driven by accurate data</li> </ul>
Value Chain Capacity Building Network (VCB-N)	22/4/20	2020	Value Chain Capacity Building Network	<a href="#">SUMMARY of VCB-N WEBINAR 1: “The impact of the Covid-19 pandemic on agricultural value chains - What we can do to mitigate the impact!”</a>	<ul style="list-style-type: none"> <li>Perspectives on impacts from 4 experts</li> <li>Multi-faceted and multi-dimensional impacts on markets, price, supply chains.</li> <li>The poverty trap due to the cycle of; lack of markets - reduced income – decrease in investment capacity- lack of working capital- lower production thus income; is the current reality for many smallholder farmers.</li> <li>Formulating longer and even mid-term policies and measures is extremely complex due to the unprecedented uncertainties and a reality that changes day-by-day.</li> </ul>
Els Lecoutere, Inge D. Brouwer,	30/4/20	2020	Wageningen UR	<a href="#">Rapid appraisal of food system risks with Covid-19 measures: Voices from the field</a>	<ul style="list-style-type: none"> <li>Update on key data related to COVID-19 and food systems</li> <li>Country perspectives of impacts on food systems from key informants</li> <li>The study concluded that food production is not directly at risk as a result of the Covid-19 pandemic. However, the underlying situation – prevalent before the crisis started – combined with an already</li> </ul>

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Marrit van den Berg, Ruerd Ruben of Wageningen UR					<p>looming food crisis as well as disruption of vital food systems linkages and labour shortages all contribute to a complex landscape of potential risks.</p> <ul style="list-style-type: none"> <li>Impacts were observed on market functioning, purchasing power, fresh food availability especially in urban areas, women's empowerment.</li> <li>Particular concerns are emerging around nutrition due to reduced purchasing power, reduced availability of fresh food and children not having access to school feeding programs.</li> </ul>
Gentilini, U., Almenfi, M., Orton, I.	03/04/2020	2020	WB/ILO	<a href="#">Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures</a>	<ul style="list-style-type: none"> <li>As of April 3, 2020, a total of 106 countries have introduced or adapted social protection and jobs programs in response to COVID-19. This is an increase of 26% since last week (when countries were 84), while the number of programs grew by almost 50%, i.e., from 283 to 418</li> <li>Within social assistance, cash transfer programs are clearly the most widely used intervention by governments: these include 124 programs in 71 countries, with 54 new initiatives introduced specifically as COVID-19 response in 36 countries. Those 124 programs would increase to 149 if social pensions, public works, childcare support and one-off universal basic income (or helicopter money) are considered</li> <li>More data points on coverage levels are also starting to emerge, especially in social assistance. A preliminary estimate of the number of beneficiaries specifically supported via COVID-related introductions, expansions, and adaptations of programs is 594 million. Those beneficiaries include both individuals (for programs like public works) and households (e.g., for conditional cash transfers), pending on how they are reported</li> <li>In terms of social insurance, paid sick leave is the most frequently-adopted measure, including in countries like Algeria, El Salvador, Finland and Lebanon. Unemployment benefits are also widely used, including for example in Romania, Russia, and South Africa</li> <li>Labour market interventions are another key way in which governments are providing support to formal and informal sector workers (i.e., we don't include demand-side actions on the labour markets). Wage subsidies account for 59% of the global labour market portfolio, with programs being implemented in Jamaica, Kosovo, Malaysia and Thailand</li> <li>Compared to last week, programs are less unevenly distributed across regions and country income groups. Importantly, measures are being introduced in low-income countries, although only on social assistance and insurance</li> </ul>
WBG/IMF	25/3/20	2020	WBG/IMF	<a href="#">Joint Statement from the World Bank Group and the International Monetary Fund Regarding A Call to Action on the Debt of IDA Countries</a>	<ul style="list-style-type: none"> <li>With immediate effect the WBG and the IMF call on all official bilateral creditors to suspend debt payments from IDA countries that request forbearance</li> <li>This will help with IDA countries' immediate liquidity needs to tackle challenges posed by the coronavirus outbreak and allow time for an assessment of the crisis impact and financing needs for each country.</li> <li>G20 leaders are called to task the WBG and the IMF to make these assessments, including identifying the countries with unsustainable debt situations, and to prepare a proposal for comprehensive action by official bilateral creditors to address both the financing and debt relief needs of IDA countries</li> </ul>
Husain, A., Sandström, S.,	04/2020	2020	WFP	<a href="#">COVID-19: Potential impact</a>	<ul style="list-style-type: none"> <li>A WFP analysis of the economic and food security implications of the pandemic</li> <li>We must make sure that tens of millions of people already on the verge of starvation do not succumb to this virus or to its economic consequences</li> </ul>

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Groder, J., Pallanch, C., Greb, F.				<a href="#">on the world's poorest people</a> <a href="#">A WFP analysis of the economic and food security implications of the pandemic</a>	<ul style="list-style-type: none"> <li>This analysis suggests that, for many poor countries, the economic consequences will be more devastating than the disease itself. There are almost 212 million chronically food-insecure and 95 million acutely food-insecure people in these countries. The large majority of these countries are in Africa, including highly export-dependent Angola, Nigeria and Chad, and highly import-dependent Somalia and South Sudan. Another region of concern is the Middle East, with countries such as Yemen, Iran, Iraq, Lebanon and Syria all facing severe economic problems</li> </ul>
Beltrami, S.	18/3/20	2020	WFP	<a href="#">Coronavirus: WFP ready to rise to the challenge</a>	<ul style="list-style-type: none"> <li>Expertise and infrastructure at service of pandemic</li> <li>Call for USD 350 million for UN funding call</li> <li>US\$2 billion for COVID-19 response, launched by the United Nations Office for Coordination of Humanitarian Affairs (OCHA) on 25 March</li> <li>Delivering equipment to Hubei province in China</li> <li>WFP with Japan support providing personal protection equipment to Iran</li> <li>Food and cash for 31,000 Afghan and Iraqi refugees</li> <li>Analysis is also extended to identifying areas of vulnerability, both in terms of locations and programmes, with school feeding being particularly affected</li> <li>WFP is currently aiming to pre-position stocks of food to be easily accessible and readily available, even in case of trade or movement restrictions, or other disruptions that may occur due to social unrest</li> <li>It is critical that substantial, fully flexible funding is made available to enable contingency planning</li> <li>Partnerships are vital</li> </ul>
WFP	29/3/20	2020	WFP	<a href="#">WFP COVID-19: Weekly Situation Report #04</a>	<ul style="list-style-type: none"> <li>\$ 350 million required to provide WFP logistics and support services as part of the Global InterAgency COVID-19 Humanitarian Response Plan</li> <li>Accelerated funding of existing plans to preposition stocks worth \$1.9 billion needed.</li> <li>11 million children supported by WFP school meal programmes are affected by school closures</li> <li>The United Nations has launched a Global InterAgency COVID-19 Response Plan, appealing for \$2 billion to help the most vulnerable communities</li> <li>WFP is assessing current operations to assess risks to supply and putting in place response measures</li> <li>Setting up a Service Provision Centre with WHO Supply Chain Interagency Coordination Cell (SCICC).</li> </ul>
WFP	31/3/20	2020	WFP	<a href="#">Economic and Market Impact analysis of COVID-19 on West and Central Africa - WFP-Regional Bureau VAM/M&amp;E/Nutrition/Supply Chain, 30 March 2020</a>	<ul style="list-style-type: none"> <li>The strong agricultural season of 2019/20, with overall higher than average production of cereals, has meant good supply of cereals and declining prices in many markets across the region</li> <li>Consumer price index (CPI) for food is at its highest since 2008 in the Monetary Union of West Africa zone</li> <li>Most of the rural people that migrated in urban areas in west Africa are involved in the informal sector. They are sending back money to their families living in rural areas. Disruption in the supply chain from China will affect all these livelihood groups to a certain degree</li> <li>In West and Central Africa, planting period starts in May/June for the main agricultural season while the Covid-19 epidemic is forcing governments to cut agricultural expenses and to prioritize health-related expenditures. If the restrictions continue, farmers won't have access to market to buy good quality seeds and fertilizers</li> </ul>



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WFP / Global Food Security Cluster	26/3/20	2020	WFP / Global Food Security Cluster	<a href="#">Global Food Security Cluster: Webinar on COVID-19 and FSC Presentation</a>	<ul style="list-style-type: none"> <li>• Short, medium and long term impacts on food security are expected</li> <li>• Nutrition affected as people move to shelf stable and packaged foods</li> <li>• Highest levels of vulnerability will be: <ul style="list-style-type: none"> <li>○ Countries with high levels of food insecurity</li> <li>○ Lower income countries characterized by more labour intensive production</li> <li>○ Countries prone to natural disasters (floods, earthquakes, etc.) and environmental disasters (locust)</li> <li>○ Areas/countries with high concentration of population, including refugee/IDP camps, slums and urban areas</li> <li>○ Countries with high security risks, conflicts and volatile environment</li> </ul> </li> <li>• In all situations poorest and most vulnerable will be worst affected.</li> <li>• OCHA / ICCG coordination started in 75% of countries</li> <li>• Significant increase on food security impact expected over next 2 months across all dimensions of access, prices production finance etc</li> </ul>
WHO/FAO/WTO	30/3/20	2020	WHO/FAO/WTO	<a href="#">Joint Statement by QU Dongyu, Tedros Adhanom Ghebreyesus and Roberto Azevêdo, Directors-General of FAO, WHO and WTO</a>	<ul style="list-style-type: none"> <li>• When acting to protect the health and well-being of their citizens, countries should ensure that any trade-related measures do not disrupt the food supply chain</li> <li>• In the midst of the COVID-19 lockdowns, every effort must be made to ensure that trade flows as freely as possible, specially to avoid food shortage</li> <li>• We must also ensure that information on food-related trade measures, levels of food production, consumption and stocks, as well as on food prices, is available to all in real time. This reduces uncertainty and allows producers, consumers and traders to make informed decisions. Above all, it helps contain 'panic buying' and the hoarding of food and other essential items</li> <li>• Now is the time to show solidarity, act responsibly and adhere to our common goal of enhancing food security, food safety and nutrition and improving the general welfare of people around the world</li> </ul>
World Bank			World Bank	<a href="#">Food Security and COVID-19</a>	<ul style="list-style-type: none"> <li>• Global production levels for rice, wheat and maize are at near ll-time highs creating not justification for trade restrictions</li> <li>• There are particular food security hotspots in fragile and conflict affected areas, countries being affected by locust plague in Africa, and countries with currency depreciation who import food.</li> <li>•</li> </ul>
World Bank	12/4/20	2020	World Bank	<a href="#">South Asia Must Ramp Up COVID-19 Action to Protect People, Revive Economies</a>	<ul style="list-style-type: none"> <li>• The latest South Asia Economic Focus anticipates a sharp economic slump in each of the region's eight countries, caused by halting economic activity, collapsing trade, and greater stress in the financial and banking sectors</li> <li>• In this fast-changing and uncertain context, the report presents a range forecast, estimating that regional growth will fall to a range between 1.8 and 2.8 percent in 2020, down from 6.3 percent projected six months ago</li> <li>• This deteriorated forecast will linger in 2021, with growth projected to hover between 3.1 and 4.0 percent, down from the previous 6.7 percent estimate</li> </ul>

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					<ul style="list-style-type: none"> <li>As played out across the region, the sudden and large-scale loss of low paid work has driven a mass exodus of migrant workers from cities to rural areas, spiking fear that many of them will fall back into poverty</li> <li>In the short term, the report recommends preparing weak healthcare systems for greater COVID-19 impacts, as well as providing safety nets and securing access to food, medical supplies, and necessities for the most vulnerable</li> <li>To minimize short-term economic pain, the report calls for establishing temporary work programs for unemployed migrant workers, enacting debt relief measures for businesses and individuals, and easing inter-regional customs clearance to speed up import and export of essential goods</li> </ul>
Ozler, B.	19/3/20	2020	World Bank	<a href="#">What can low-income countries do to provide relief for the poor and the vulnerable during the COVID-19 pandemic?</a>	<ul style="list-style-type: none"> <li>Even in the formal sector of the economy, the systems are likely to be lacking in many settings to provide liquidity to employers (through loans or grants) so that they can pay their employees through the crises. So, low-income countries have no choice but to rely on their social protection systems and their safety nets to provide relief during the pandemic.</li> <li>Very good analysis of cash transfers</li> </ul>
Daniel Gerszon Mahlerchristoph Laknerr. Andres Castaneda Aguilarhaoyu Wu	20/4/20	2020	World Bank	<a href="#">The impact of COVID-19 (Coronavirus) on global poverty: Why Sub-Saharan Africa might be the region hardest hit</a>	<ul style="list-style-type: none"> <li>COVID-19 pushing about 40-60 million people into extreme poverty.</li> <li>Though Sub-Saharan Africa so far has been hit relatively less by the virus from a health perspective, our projections suggest that it will be the region hit hardest in terms of increased extreme poverty.</li> <li>At the country-level, the three countries with the largest change in the number of poor are estimated to be India (12 million), Nigeria (5 million) and the Democratic Republic of Congo (2 million). Countries such as Indonesia, South Africa, and China are also forecasted to have more than one million people pushed into extreme poverty</li> <li>At the country-level, the three countries with the largest change in the number of poor are estimated to be India (12 million), Nigeria (5 million) and the Democratic Republic of Congo (2 million). Countries such as Indonesia, South Africa, and China are also forecasted to have more than one million people pushed into extreme povert</li> <li></li> </ul>
Malpass, D.	27/3/20	2020	World Bank	<a href="#">March 27, 2020 end of week update: Important steps</a>	<ul style="list-style-type: none"> <li>US\$ 14 billion of COVID-19 Fast Track Facility – 60 projects 2.8 billion approved</li> <li>Financing framework to board</li> <li>Need as much as US\$ 160 billion over next 15 months to support recovery</li> <li>Call on G20 Leaders to suspend payments for bilateral credit for poorest countries</li> <li>Call for debt relief with IMF</li> <li>Coordination with regional MDBs</li> <li>Role of IFC in response</li> </ul>
Mattoo, A., Ruta, M.	27/3/20	2020	World Bank	<a href="#">Viral protectionism in the time of coronavirus</a>	<ul style="list-style-type: none"> <li>Negative impact of trade restriction on medical supplies and food</li> <li>In 2008-2011, governments worldwide imposed 85 new export restrictions on food products. Research showed that these actions pushed world food prices up by another 13 percent on average—and by 45 percent for rice</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<ul style="list-style-type: none"> <li>• Deeper international cooperation is critical</li> </ul>
World Bank	3/3/20	2020	World Bank	<a href="#">Three imperatives to keep food moving in a time of fear and confusion</a>	<ul style="list-style-type: none"> <li>• Production levels and global stocks for staple foods are at an all-time high and world prices for most food commodities have been remarkably stable since 2015 – this is plenty of food</li> <li>• Recognise domestic issues not global supply are the major constraint</li> <li>• Ensure countries do not implement trade bans</li> <li>• Implement a set of domestic good practices to keep food moving: <ul style="list-style-type: none"> <li>○ Putting money in people’s pockets through targeted cash transfers so they can buy food;</li> <li>○ Ensuring delivery of food to complement cash transfers as part of safety net operations in areas where availability of food is severely disrupted;</li> <li>○ Continuing to provide school meals as “take-out” packages to ensure nutrition is maintained for vulnerable children, including food for other family members, effectively turning schools into emergency food distribution points;</li> <li>○ Declaring food as an essential commodity, and all food-related services as essential;</li> <li>○ Opening “green channels” for food, trade and agricultural inputs to ensure supply chains are kept open and functional;</li> <li>○ Ensuring access and availability of key agricultural inputs (seeds, labor, fertilizer, machinery, etc), by keeping input supply chains functioning to ensure timely production for the planting season coming up and providing special permits for migrant labor;</li> <li>○ Working with food logistics companies to develop health screening protocols and providing targeted, time bound and transparent incentives to hire workers to maintain food transport and logistics, including deliveries to remote and needy areas;</li> <li>○ Reviewing regulations to permit closed food service establishments (restaurants, food centers, e-commerce companies) to redeploy their equipment and assets to deliver essential foods to areas needing it the most;</li> <li>○ Supporting informal and formal food-related Small and Medium Enterprises to maintain cashflow and survive potentially catastrophic drops in demand so they can recover when the crisis is over.</li> </ul> </li> </ul>
Hellegattee, S., Hammer S.	30/3/20	2020	World Bank	<a href="#">Thinking ahead: For a sustainable recovery from COVID-19</a>	<ul style="list-style-type: none"> <li>• Initial response needs to be to use and expand existing social safety nets</li> <li>• Subsidised loans and public guarantees</li> <li>• Due to income loss aggregate demand will be depressed for extended period</li> <li>• Strong case for public spending (tax cuts, cash transfers and subsidies, spending on sector specific sectors or projects) to provide stimulus for economic recovery</li> <li>• Do not overlook longer term goals in how stimulus is direct such as decarbonisation</li> <li>• Start identifying best possible stimulus packages for post crisis recovery</li> <li>• Green stimulus Framework</li> </ul>
World Bank	4/5/20	2020	World Bank	<a href="#">Food Security and COVID-19</a>	<ul style="list-style-type: none"> <li>• Global markets for food staples are well supplied and prices are generally stable (see Commodity Markets Outlook for more details). Global production levels for the three most widely consumed staples (rice, wheat and maize) are at or near all-time highs.</li> <li>• However, the prices of certain cash crops -- an important source of rural income -- have been depressed by the slowing of global demand.</li> </ul>

Author	Date	Year	Sources	Title	Summary
					<ul style="list-style-type: none"> <li>• Labor shortages (due to morbidity, movement restrictions, social distancing rules) are starting to impact producers, processors, traders and trucking/logistics companies in food supply chains – particularly for food products that require workers to be in close proximity.</li> <li>• Loss of income and remittances is reducing people’s ability to buy food and compensate farmers for their production. The United Nations World Food Programme has warned that an estimated 265 million people could face acute food insecurity by the end of 2020, up from 135 million people before the crisis.</li> <li>• Food Security Hot spots include – fragile and conflict affected areas, countries with multiple crises, chronically poor people, countries with significant currency depreciation.</li> <li>• World Bank is working with multiple countries to provide support measures</li> <li>• Helping to tackle the locust outbreak in Africa which is the worst in decades.</li> </ul>
World Bank	9/04/20	2020	World Bank	<a href="#">COVID-19 (Coronavirus) Drives Sub-Saharan Africa Toward First Recession in 25 Years</a>	<ul style="list-style-type: none"> <li>• Growth in Sub-Saharan Africa has been significantly impacted by the ongoing coronavirus outbreak and is forecast to fall sharply from 2.4% in 2019 to -2.1 to -5.1% in 2020, the first recession in the region over the past 25 years, according to the latest Africa’s Pulse, the World Bank’s twice-yearly economic update for the region</li> <li>• The analysis shows that COVID-19 will cost the region between \$37 billion and \$79 billion in output losses for 2020 due to a combination of effects. They include trade and value chain disruption, which impacts commodity exporters and countries with strong value chain participation; reduced foreign financing flows from remittances, tourism, foreign direct investment, foreign aid, combined with capital flight; and through direct impacts on health systems, and disruptions caused by containment measures and the public response</li> <li>• While most countries in the region have been affected to different degrees by the pandemic, real gross domestic product growth is projected to fall sharply particularly in the region’s three largest economies – Nigeria, Angola, and South Africa— as a result of persistently weak growth and investment</li> <li>• In general, oil exporting-countries will also be hard-hit; while growth is also expected to weaken substantially in the two fastest growing areas—the West African Economic and Monetary Union and the East African Community—due to weak external demand, disruptions to supply chains and domestic production</li> <li>• The COVID-19 crisis also has the potential to spark a food security crisis in Africa, with agricultural production potentially contracting between 2.6% in an optimistic scenario and up to 7% if there are trade blockages. Food imports would decline substantially (as much as 25% or as little as 13%) due to a combination of higher transaction costs and reduced domestic demand</li> </ul>
Reidy, S., Lyddon, C., Mckee, D.	31/3/20	2020	World Grain	<a href="#">COVID-19 impacts agriculture from farm to fork</a>	<ul style="list-style-type: none"> <li>• Across the board, the agriculture industry is concerned about logistic issues, whether it’s moving raw materials across closed borders or having enough healthy employees to keep facilities operational and products moving</li> <li>• Good overview of concerns from grain sector</li> </ul>