

COVID 19 and Food Security

François Grunewald*

Groupe URD, Plaisians, France

*Corresponding author: François Grunewald, Groupe URD, Plaisians, France

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Abstract

The COVID-19 crisis and the effect of measures taken to reduce its impact on health systems have had major repercussions on food security. These repercussions have raised the alarm about the prospects of a global food crisis. To find short- and medium-term solutions we need to consider what triggered the alarm; and to analyze the repercussions of measures taken to contain COVID-19. An analysis is needed at local, national and regional levels - and also by function. Key areas impacted by the COVID-19 crisis and the dedicated response include various sub-sectors of the agricultural sector; agricultural value chains; food and farming, systems. The impact of the COVID-19 crisis on agricultural prices is complex, and generally associated with speculation. The impact is strong in the agricultural trade, whether focused on supplying urban markets or oriented towards exports. The result is a steep decline in farmers' revenues. In the rural economy, restrictions on mobility are the main reason for the negative repercussions of the COVID-19 crisis. These restrictions hinder transport of agricultural products to key trading and commercial hubs; the supply of and access to agricultural inputs; seasonal "transhumances". All these challenges leave rural populations more vulnerable to attack from other hostile forces, such as the COVID-19 crisis. Their capacity to be resilient is likely to be already weakened.

Keywords: Food security; Mobility; Rural markets; Vulnerability

Recommendations

1. Identify and implement all available means to ensure that the produce on which farmers' incomes depend reaches markets; introduce additional revenue-creating activities in rural or farming communities; improve the supply of, and access to, agricultural inputs; and provide livestock farmers with support services.
2. Measures taken to contain the COVID-19 crisis have cost farming communities dear. It is essential to shore up revenues to enable farmers and rural families to survive. This entails enhanced social safety nets; improved credit systems; the availability of financial facilities for sectors involved in trading or processing agricultural produce.
3. Improve the logistics of supplying agricultural produce to urban areas both by establishing protocols specifically designed to protect produce markets and those who use them; and by designing and implementing "short circuits", which shorten the chain of supply between producer and market; and by producing food within town and city boundaries.
4. Reform agricultural policies with the objective of decreasing vulnerability to external shocks, and giving greater priority to meeting local needs, particularly the needs of local urban

areas, so they become less dependent on imports.

5. New epidemiological risks are likely to become a regular phenomenon. They will arise, at least in part, because of problems with the way the current agro-industrial production system operates; and because of global imbalances in agricultural and ecological systems. It will be essential to re-evaluate and re-calibrate the relationship between the Earth's human population and nature.
6. It is also essential to re-evaluate consumption patterns and habits as a basis for designing and developing a more resilient agricultural sector with a more local focus, while reducing its environmental impact.

Introduction

There are increasingly alarming reports about imminent threats on a global scale to economic sustainability and food security. These threats, and the risks entailed in attempting to counter them, need careful analysis.

The principles of humanitarian assistance unquestionably apply in the present situation, which calls into question, simultaneously, the economic paradigm at global and national level; the global trading system; food systems and agricultural value chains; and at the most basic level, household food security. We need to look further than the notion of mobilizing financial

resources to fund development cooperation programmes, which is the classic response in situations that threaten economic and food security.

A more comprehensive analysis is needed, breaking down the issue in order better to understand the dynamics of agricultural policy, including policy on farming methods and output; and policy on securing the supply of produce to town and city markets.

Agricultural systems, and their problems, must be examined in their specific national and regional context if we are to develop short-term solutions for the coming weeks and months while the COVID-19 crisis continues; and then, later, long-term solutions that strengthen the resilience needed to cope with the aftermath of the COVID-19 crisis, a continuing challenge that may be prolonged, or may return or recur later.

Our analysis considered problems at several levels but oscillated continually between these because of the close connection between them. We therefore looked at:

- global diagnosis of the impact of measures to contain the COVID-19 coronavirus;
- global markets in agricultural products;
- local systems, composed of agricultural value chains;
- the “granulometry” of agriculture and ecology sectors.

The COVID-19 Coronavirus Crisis; and Measures to Contain the COVID-19 Coronavirus

It is not the COVID-19 crisis itself that has brought about a crisis in the food system, but the measures taken to try to contain the virus. These have variously included types of “lockdown”, as well as the closing down of internal markets and the sealing of international boundaries, both of which may mean products becoming scarce and thus prices being pushed up. The 2008 financial crisis was primarily a crisis of prices and speculation, linked to the global financial situation-including the vast market in sub-prime mortgages in the US - as it then stood. As it happens, global food stocks in 2020 are in good shape. However, the measures deemed necessary to contain the COVID-19 crisis have placed complex stresses on demand and supply in relation to food production, and have had problematic, sometimes contradictory, effects on prices at local level.

On the world markets, only rice and corn have experienced a price rise since the start of the COVID-19 crisis. This was due to export bans put in place by a few countries, notably India and Vietnam. Restrictions imposed globally on the flow of goods, including imports, led to local scarcities, which in turn led to rapid price rises, which were difficult for the most vulnerable groups of consumers to absorb. In some contexts, particularly for basic products like cereals, price rises can benefit small-scale farmers if they still have stocks to sell. By substituting their local produce for

the imports that are no longer flowing into the country, they can take advantage of new, higher prices. However, in the “developed” global North, the COVID-19 crisis developed between four and six months after the end of the main harvest season. If farmers are not harvesting and storing produce during the period of “lockdown” - which they are not in the northern hemisphere - then saleable surpluses are instead being depleted.

At the same time, the “lockdown” itself - the key measure undertaken by most countries to slow the transmission of the COVID-19 coronavirus-and the fear of what might follow on from the crisis have induced a marked reduction in demand and consumption. People tend to save what they currently have “for whatever may happen next”.

Since March this year (2020), global prices have broadly declined. This is due to the sensitivity of the global price of some commodities that potentially impact the whole chain of production. Produce destined for export, such as cocoa or coffee, is particularly affected.

From March onwards, produce could no longer be transported to ports, nor shipped out of ports. Stocks began to build up; and the price paid to producers collapsed. The situation is obviously even more serious for perishable exports, such as fruit, vegetables, flowers or meat. Storage facilities, including cold storage facilities, for this type of produce are by now saturated.

The situation is not so very different for perishable farm produce destined for sale in local markets. In many Asian and African countries, markets are clogged with unsold products because potential purchasers and consumers have very restricted mobility. These products will not last. Their price falls, since small-scale farmers who have brought them to the local market to sell prefer to settle for what little they can get rather than to return home with nothing.

From the broadest perspective, the COVID-19 crisis has demonstrated the extent to which our globalized agricultural system has grown weak, to the point of fragility. We are continually on the edge of a state of disequilibrium, as the IPES FOOD report on COVID-19 says: “Our food systems have been on the razor’s edge for decades: children are just one school meal away from hunger; whole countries just one customs barrier away from food penury; farms just one restriction on movement away from a dire shortage of workers; and families in poor regions just one day’s salary away from food insecurity, extreme poverty and enforced migration.”

Food Security or Insecurity: Different Situations with Different Outcomes

Different agricultural sub-sectors experience the present COVID-19 situation differently. They are not all equally vulnerable to the impact of measures imposed to contain the pandemic. Two key sub-sectors-sedentary farming and more nomadic livestock

farming practices-are both vulnerable to the effects of the national, regional or global response to the COVID-19 crisis, but in different ways.

Local Farming: Subsistence with a Small Surplus to Sell in Local Markets

In the majority of rural villages in the global south, “lockdown” measures are in practice fairly mild, and indeed are not very strictly observed. There is, as a result, a risk that the COVID-19 coronavirus could be widely propagated; but the more relaxed restrictions on the rural population also have the effect of reducing at local level the negative economic impact of the COVID-19 crisis. There are more likely to be health risks arising from migration into the countryside by town and city dwellers who fleeing the difficult conditions of “lockdown” in town. For these farming populations in zones of low density, the work they do in the fields and their simple life in small dwellings made of sticks and brushwood will actually serve to protect them: even more so if the virus is as sensitive to heat as some research outcomes appear to indicate. In their case, the chief constraint will be any restrictions on access to markets where they would plan to sell surplus produce and buy goods needed for their own consumption. Rural communities with this profile will not be seriously at risk from measures put in place to contain COVID-19. Unless there are other factors that have a bearing on their situation: war or conflict; the decline of their food stocks in the wake of natural disasters of various types; or locust swarms, like those currently scourging East Africa.

Pastoral (Livestock) Farming, Depending on Transhumance

Severe restrictions on movement, or measures prohibiting all movement, have a very serious impact on pastoral livestock farming, especially in this late spring season when flocks and herds are about to return, as they do each year, to their seasonal grazing grounds on higher land. The farmers who have been looking after the animals during the dry season now themselves need to get to work on their own plots of land where they grow crops and vegetables. If restrictions are placed on “transhumance” across borders animals may have only limited access to grazing. Animals may as a result become concentrated in higher-density groups, which may result in the propagation of disease amongst their large numbers. We may note, however, that several factors, even before the COVID-19 pandemic, hindered the ability of pastoral farmers to raise their livestock. Access to urban markets to sell milk or meat, which is the way livestock farmers earn their living - and also engage socially with the sedentary farming families they meet in towns or cities - can pose economic problems for the farmers on the one hand and also socio-political problems for the entirety of the population living in a given territory. Another outcome may be the collapse of markets for meat because of the difficulties of selling it, when it must be sold before the physical condition of the

animals (weight loss because they are not getting adequate access to pasture) jeopardizes their lives. In short, if this COVID-19 crisis lasts longer than a few weeks meaning that the livestock cannot be led to the pastures in time for the rainy season, there is a risk of elevated mortality among the animals. We shall observe what happens in the relevant parts of the world at the end of July, when sheep would normally be bought in large numbers in the context of the festival Aid El Kebir (Tabaski). This will give a good indication of the current state of the meat markets.

Production for Export or Sale in Large Quantities to Urban Areas

This category of farmer, and in fact the entire agricultural sub-sector of farming for profit (rather than subsistence), is threatened by any type of transport restriction, or by limits to the scope for selling produce. Farmers producing flowers in Ethiopia, for example, or cocoa in Cote d’Ivoire involving fresh produce, simply must be able to export their production. Otherwise, they face major losses, if not total ruin. Some products, such as cocoa and coffee, can be stored, so any immediate problems with selling may not be disastrous if “lockdown” restrictions are relaxed before long; but there will be an inevitable loss in product quality; and there will also be intense competition with other sources of the same product in other parts of the world. Competition like this is likely to lead to the collapse of product prices in export markets.

Crops destined for export may often depend on the availability of labor at different phases of the calendar for cultivation. Some points in the growing and harvesting cycle require an intensive investment in labor. Farmers cannot manage if there are limitations on the mobility of the agricultural workforce during the crop-planting phase, or indeed at later phases of the growing cycle. In France, for example, the agricultural sector relies heavily on a seasonal labor force. Within Europe a number of countries have set up chartering arrangements to ensure migrant labor is available when needed. However, there are few African countries that could afford such an arrangement. In countries like Cote d’Ivoire, for example, that people are already changing or modifying their work, abandoning work on crops and concentrating pretty much on subsistence farming for themselves and their families.. Some cocoa producers would in normal times expect to spend early April working on other types of plant that are grown beneath the cocoa trees. It is also the season when they normally would be sowing extensive maize and rice crops. In the meantime the women, instead of working in the cocoa plantations, spend their time and energy working on their own vegetable patches.

Rural Inequality; Inequality of Access to Assistance

The inequalities already endemic in many of the world’s rural areas are bound to be accentuated by the crisis if the situation is left to be managed without external intervention. Small-scale farmers

will accumulate debt, they will eat into their capital, while others will take advantage and benefit from the crisis. In many countries, including European countries and Latin American countries, state aid has been made available for agriculture. However, as so often happens, it is the large-scale farmers who are reaping the benefits of this type of initiative. They are better equipped to take part in negotiations (for example, in France with the FNCEA); or they have better connections [than the small-scale farmers] with the ruling party, as is the case, for example, in Colombia. They are thus able to capture the lion's share of aid made available by government to the agricultural sector at this period of crisis. This worsens already existing inequalities in the rural sector and exacerbates the vulnerability of small-scale farmers.

War and Conflict; Environmental Factors; Climate Change

Under the pre-existing state of affairs, before COVID-19, rural areas were already relatively fragile and potentially less well adapted to dealing with the sort of road-blocks that the COVID-19 containment measures put in their way. Sometimes war and conflict, or natural disasters, in these fragile areas prevented their population from travelling far from home, which perhaps should be seen as an advantage in the context of COVID-19, since immobility would reduce the likelihood of extensive propagation of the virus. On the other hand, the inhabitants of such areas are equally often at risk of accelerated contamination, since wars and catastrophic natural disasters tend to provoke an exodus of rural dwellers from the countryside, so that dense concentrations of people build up in the suburbs of towns and cities: the risks of contagion immediately increase. Whether mobility is restricted, or whether people are obliged by events to move away into more crowded urban areas, in either case access to the affected populations is likely to be somewhat difficult; and it will be less easy to deliver any aid or assistance they may be entitled to. Other naturally occurring crises affecting food security such as droughts or massive onslaughts by pests (such as locusts) can only be exacerbated by measures taken to contain the transmission of the COVID-19 coronavirus.

Conclusion

But the impact of COVID 19 on humanitarian contexts is huge and diversified. It increased pre-existing vulnerabilities and held up the delivery of numerous essential services and activities, as the result of the measures implemented to prevent the Coronavirus from spreading. And these impacts will last, with a growing impact on nutrition. The closure of Health Facilities and family planning has had and is having an impact on a wide range of issues such as immunization campaigns or early- pregnancies. The containment measures, the social isolation, the economic difficulties, and the fear for the future is having a deep impact on mental health in many countries and might become a priority in some places if situation doesn't improve. Some specific groups seem to be disproportionately impacted in terms of protection

with the closure of schools, the lock down measures leading to more violence against women and children, the difficult access to protection for IDPs and refugees, etc. But, most worrying are the likely Impacts on economic and food security. A significant degradation of food security levels is reported in many countries (late 2020: 36% of the population facing acute food insecurity in Afghanistan, around 25% of the population food insecure in DRC, 40% of the population facing high levels of acute food insecurity in Yemen, etc.), due to a wide range of measures from closure of frontiers, disruption of global trade, increase in unemployment rates, decrease of remittances from diaspora, etc. Here again, the closure of nutrition centers in many areas had a significant impact on children, in particular in areas where malnutrition is a deadly killer, as in Sahel, the Horn of Africa, Yemen, Afghanistan, etc.

Proposals for Action

Provide Support to Farmers and Agricultural Management Models

When confronted by unusual situations, as they are at present, small-scale farmers (particularly small-scale farmers, and others, too) often give proof of great ingenuity. This deserves every possible support. Support and assistance should be structured flexibly, and ideally should be as decentralized or localized as feasible. Organizations set up by the farmers themselves should be priority targets for support and aid. By building on existing "coping" strategies and capacities for resilience it may be possible to slow or halt the process of decapitalization of small-scale farmers, or the impoverishment of swathes of the rural sector, including crop farmers and more mobile or nomadic livestock farmers. The latter, as discussed, are especially vulnerable to restrictions imposed on their ability to move around with their flocks or herds of animals.

Farmers need guaranteed access to credit; assistance with procuring agricultural inputs (particularly seeds); assistance in implementing protective or barrier measures to ensure sanitary conditions in the markets where they sell their produce. This type of assistance can be provided rapidly.

Livestock farmers need support to ensure their animals are fed. Even more important is protecting the health of the flocks and herds to avoid a total livestock catastrophe should an infection develop and be transmitted amongst them. The goal must be to keep the animals alive and in reasonable health until they reach the seasonal pasture, preferably to coincide with the time of the rains.

Intervention in agriculture sector modalities for exporting produce is more difficult. Yes, no doubt it is important and useful to ensure that guaranteed loans are made available; and loan conditions improved so that the costs of storage and conservation of produce can be met: for example, higher levels of energy consumption must be afforded, to ensure that cold chambers continue to function correctly, even at their current increased load.

It is also the right time to begin a process of reflection on different styles or methods of agriculture which might be less vulnerable to external shocks. The COVID-19 crisis may play a useful role in awakening consciences to the fact that certain types of consumption are simply unsustainable (even morally wrong), dependent as they are to an export sector whose environmental footprint is excessively large.

Strengthen Social Safety Nets

To avoid total disaster—that is food insecurity and economic instability—in the rural sector during the COVID-19 crisis all available mechanisms enabling the drawdown of additional financial resources should be mustered. These include social safety nets, micro-credit schemes, savings schemes and other types of credit system, insurance plans, etc. The rural sector has had considerable experience of this type of financial assistance mechanism in the context of longer-term development programs and also as part of packages of humanitarian relief. It should be possible to identify which previous experiences may be relevant and applicable this time around, in the COVID-19 crisis; then to target the populations most likely to benefit; and to support them in scaling up as necessary once the interventions have been determined and put in place.

Improve Protocols for Supplying Farm Produce to Towns and Cities

There is no question that the world is steadily urbanizing. More than half the population of the planet now lives either in towns and cities or in suburban or peri-urban areas; and therefore depend for food purchases on urban markets, combined with the output of the food processing sector. It must in future be feasible to supply produce to urban areas safely and securely from a sanitary standpoint, observing the protocols of protection against COVID-19. This will entail zoning and other protective measures in and around markets; the installation of shorter “circuits” or chains of supply; and the fostering where possible of agricultural production within urban areas, on small lots of land, or in cooperation with authorities which could make land available for basic farming activities.

Convince National Governments and Regional Institutions and Organizations to Make Progress with Agricultural Reform

Whether agricultural systems are capable of resilience, or resistance to shock, or whether they are so vulnerable that they cave in, very much depends on agricultural policy at both national and regional levels: such policy is key to future planning. It is a matter of consultation and choice which rural sectors are to be prioritized for support, and which other sectors or sectors are to be set aside as a consequence. Price support mechanisms; arrangements for storage in the event of future disaster; strengthening regulations against speculation: these are all avenues that should be explored.

At the same time improved technical approaches and investments are needed in the processing production and processing systems and in agricultural value chains.

Re-Evaluate and Recalibrate the Relationship between the Demography and the Productive Capacities and Nature

These last 20 years have been characterized by the emergence of serious animal-borne illnesses, illnesses that travel from animal hosts to people by means of different mechanisms. Transmission is often made all too easy because of the major environmental imbalances which have become increasingly marked in the last several decades. Illnesses that manage to cross from one species to another are scientifically rare. However production systems which depend heavily on intensive methods of production, often involving animals kept in very crowded conditions, create conditions that are propitious for the emergence and transmission of mutating varieties of viruses or bacteria, which may change from harmless vectors to aggressive carriers of serious disease. This was the case for the first SARS and for MERS.

Crop production has been subjected to increased uniformity by contrast with former natural diversity. In Africa, the loss of important biodiversity from tropical forests created precisely the conditions that enabled Ebola to emerge from forested territory; and to mutate into a serious illness affecting the human population.

New Patterns and Types of Solidarity, Accompanied by New Types and Patterns of Consumption

There will be a continuing role for humanitarian aid and for development assistance. These will be important in the ongoing fight against the COVID-19 coronavirus and the aftermath of the current crisis. Beyond the crisis, however, it’s a whole new world that we need to think about and plan for in order to strengthen the resistance and resilience of rural societies to enable them to cope with major shocks like the coronavirus and the shocks and the repercussions of and following on from our experience of the measures taken to contain it, we must look for other ways to join forces to meet such threats, which are all too likely to increase in number, and be yet more severe in the future. Already development NGOs operate, and have operated for years, in the global South on the basis of committed solidarity with movements and ideas generated by small-scale farmers themselves. Nor should we forget the extent of human empathy that has long been extended to rural populations affected by conflict or by natural disasters. We must draw on our instincts and experience to strengthen solidarity, including between north and south at times of crisis.

We in the north need, furthermore, to review and reconsider our consumption patterns. We also need to review and reconsider the balance of power between civil society in in global north and south.