



# Food systems and COVID-19 in Latin America and the Caribbean: How to reduce food loss and waste

Bulletin 9

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## 1. Editorial



The ongoing pandemic has put the food and nutritional security of millions of Latin Americans and Caribbean people at risk. The countries of the region have taken some measures to try to stop the spread of the virus, such as the closure of ports (air and sea), restrictions on free movement, and physical distancing; such measures have affected the normal functioning of food systems.

These disruptions in the agrifood value chain have resulted in increased food loss and waste (FLW). We are not yet in a position to say when the rate of infection will decrease, let alone when we will return to normal. Such uncertainty makes it imperative to analyse how food loss and waste affect food systems. Only then can we, in a second step, design policies that will prevent food loss and waste, and reduce their impact. In that regard, for example, in cases where it is not possible to avoid surpluses that cannot be marketed, the necessary measures must be taken to facilitate their collection and distribution, ideally among the most vulnerable populations.

## 2. Key messages



- Food loss and waste is a global problem that precedes the COVID-19 pandemic.
- Qualitative analyses indicate that food loss and waste have worsened during the pandemic.
- For the same reason, a quantitative estimate must be made to know exactly how COVID-19 affects food loss and waste.
- Reducing food loss and waste can aim to improve economic performance, food security, nutrition and/or environmental sustainability.
- In a pandemic scenario, efforts should be focused on improving food security.
- Before the pandemic, measures to strengthen food security were expected to focus on the first links in the agrifood system. Besides, they were supposed to be more effective in lower-income countries.
- In a pandemic, it appears that food recovery and distribution measures can be implemented along the value chain, with different emphasis per country.
- Thus, developing countries with high levels of food insecurity should concentrate their efforts on preventing food loss (the first links in the value chain). To this end, it is essential to extend the post-harvest life of fresh produce and encourage more direct marketing (between farmer and consumer).
- In more developed countries, with populations that mostly show high levels of food security, measures should aim at reducing food waste, that is, its recovery and redistribution (final links in the chain), in order to improve the food security of the most vulnerable populations. In this sense, food banks and the role of the state in coordinating these sectors are important.



### 3. Impact of COVID-19 on food loss and waste



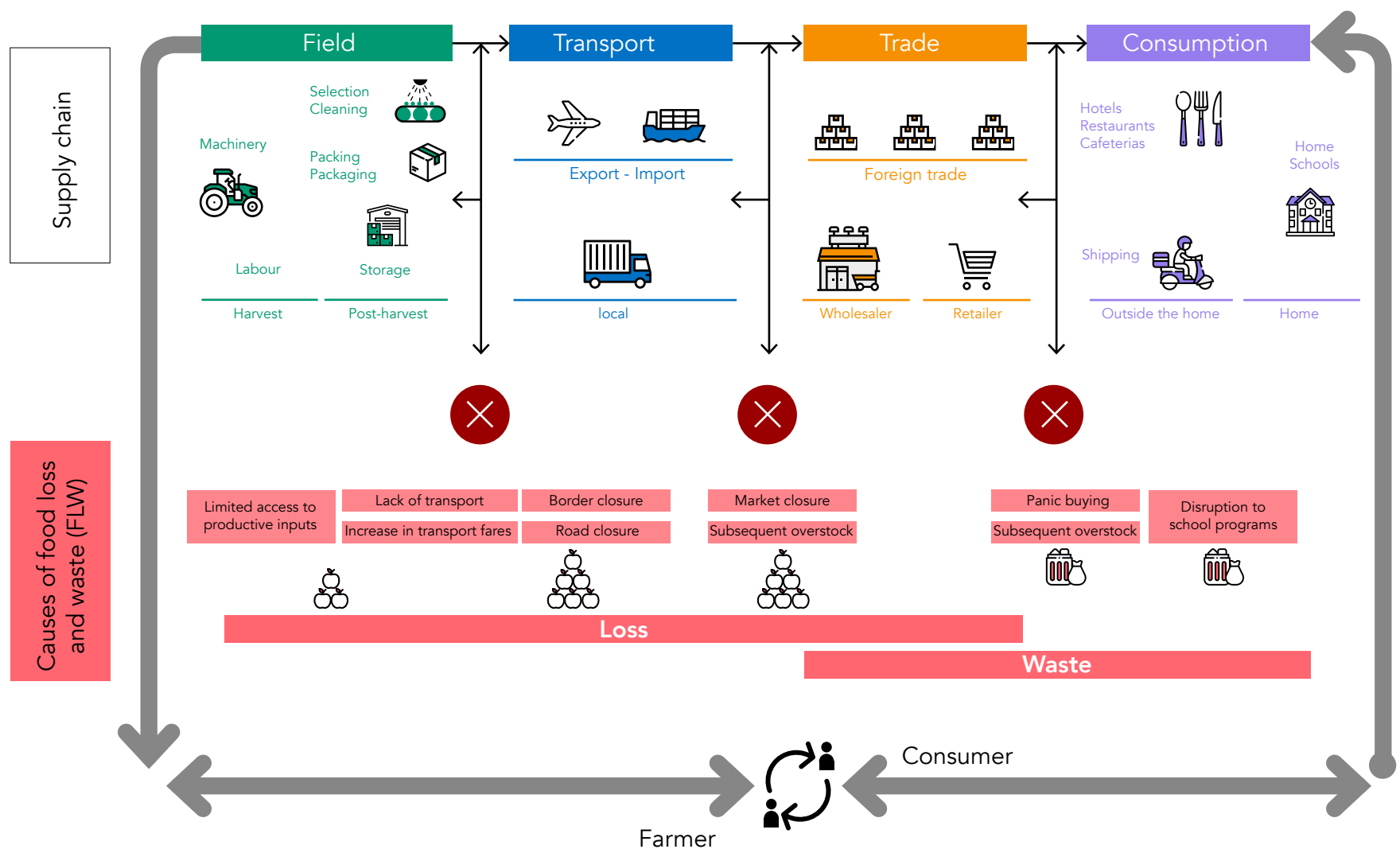
The idea that food is lost or wasted may seem simple, but in practice, there is no single definition. Generally, by food loss and waste, we mean the reduction in the quantity or quality of food along the food supply chain. Food loss and waste can be differentiated by the stage of production at which they occur. **Loss** occurs at the production, post-harvest and processing stages of the food supply chain, involving the whole chain except the interaction between the marketer and the final consumer. **Waste**, on the other hand, occurs at the end of the food chain and is not closely related to production, but rather to the behaviour of retailers and consumers (FAO, 2011 and 2019).

Before the pandemic, it was estimated that about 30 percent of the world's food was lost or wasted each year. This estimate, although preliminary, has raised awareness of the issue (FAO, 2011). More recent analyses estimate that 14 percent of the food produced is lost (FAO, 2019).

Today, to measure the impact of the pandemic on the agrifood system, we need analyses that shed light on the causes of the greatest food loss and waste during the pandemic. National governments have a great challenge: first, finding the best way to measure food loss and waste and, then, incorporating these issues into the design of public policies.

Precisely because of the absence of reliable regional data on the subject that would allow us to measure the impact, we carried out a qualitative analysis based on news and notifications from national offices of the Food and Agriculture Organization of the United Nations. The result is that the situation seems to have worsened. Thanks to the data collection carried out by our office in recent months (February to June 2020), we can summarize in the following diagram the possible impact of COVID-19 on food loss and waste.

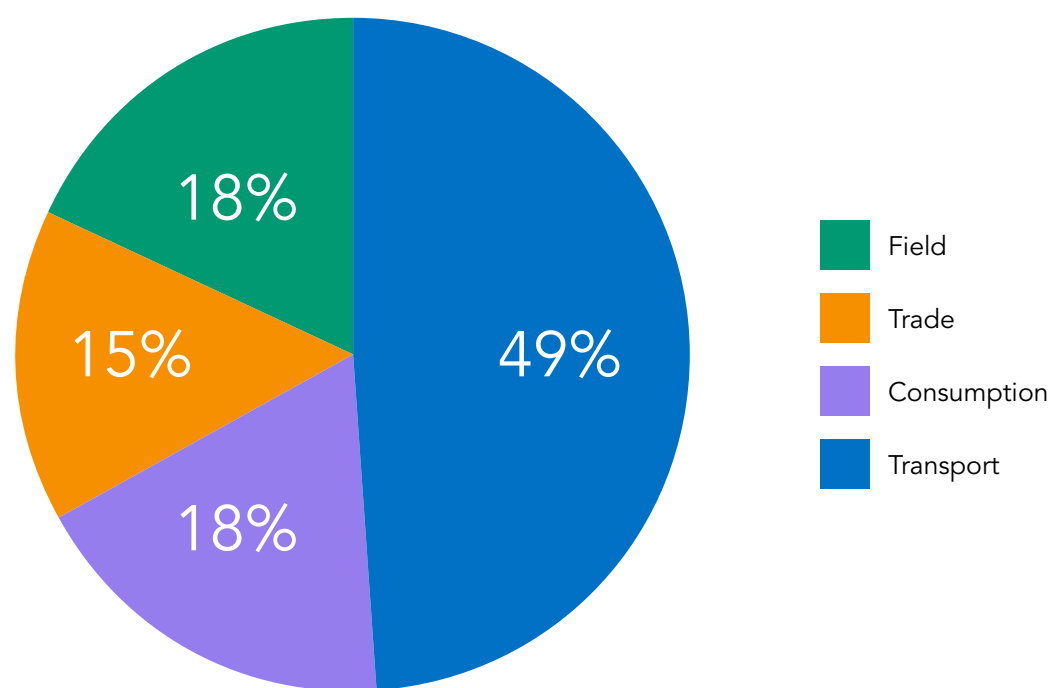
Figure 1/ Potential impacts of COVID-19 on food loss and waste



Source: FAO

Our research also allows us to assume that, while there is disruption along the value chain, it is not particularly high. In other words, access to inputs has been affected by COVID-19, but not in a radical way. The largest proportion of news items are transport (49 percent) and field (18 percent), intermediate segments of the value chain, where certain measures – such as road closures, shutdowns or limited access to distribution centres – could be generating significant food losses. In contrast, in the final stages, only 18 percent and 15 percent correspond to consumption and trade, respectively.

**Figure 2/** Qualitative analysis of press releases related to food loss and waste due to COVID-19 in Latin America and the Caribbean



Source: FAO

### 3.1. Field

One of the impacts of the pandemic on the agrifood chain is the limited access to certain agricultural inputs, whether due to a disruption in import or logistics process or to a price increase (dealing with high prices is particularly difficult for small producers). Regardless of the cause, shortages of productive inputs can result in food loss during harvest, post-harvest or processing.

*The health and economic crisis caused by the coronavirus has increased the price of inputs, which has affected rural Mexico, where food production must be guaranteed.*

Revista Contralinea

Due to the health restriction measures, a significant part of the workforce has not had to report to their workplaces. In most countries, this measure does not apply to workers in the agrifood sector, a basic service that cannot be interrupted in its production and distribution.

However, there are known cases in which workers in the agrifood sector were prevented or had difficulty accessing their workplaces, mainly because of the quarantine measures in place, reduced access to transport for local workers, and the closure of borders for temporary immigrant workers. A reduction in the workforce is known to be detrimental to harvesting, post-harvesting and food processing, including loss associated with the deterioration of perishable foods not harvested in time. This is a particularly acute problem in low-income countries where the seasonal harvest has begun, as it could further exacerbate existing high levels of loss (FAO, 2020).

The main reasons for farmworkers not showing up at their workplaces were quarantine measures and reduced access to transport for local workers, as well as border closures for temporary migrant workers.

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*In the province of Buenos Aires, Argentina, an agricultural company producing potatoes, onions and garlic confirmed that, due to health restrictions, the number of available workers dropped by half.*

*In **Colombia**, although there is no official consolidation of the crop being lost, according to a FAO study, 87 percent of the producers consulted say they have had difficulties. The survey was carried out in twenty departments of the country.*

*In **Costa Rica**, the efforts to stop the entry of illegal immigrants from Nicaragua have redoubled, to prevent further spread of COVID-19 from that country. However, the Costa Rican agricultural sector is dependent on immigrant labour.*

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Sources: Radio France International, Sociedad de Agricultores de Colombia and Diario Extra

In general, **seasonal workers in the agrifood system have a low level of formalization and, therefore, of health protection**. It is imperative to protect these workers, providing them with the necessary health implements and including them in social security schemes. The objective is to prevent them from being infected and becoming vectors for the spread of the disease, to allow them to continue to carry out their work, and to ensure a smooth supply chain (FAO and ECLAC, 2019a).

## 3.2. Transport

### a. Local

Another critical node is the limited access of producers to local markets. When logistical problems prevent farmers from accessing markets and delivering their products, two things happen: **shortage** and **food loss**.

Family farming has been most affected by the lack of transport. **Less frequent transport** – and in some cases increased costs – is a critical obstacle for small producers to get their crops and products to market. Within this group of producers, those who have felt the effects of the pandemic most strongly have been rural and indigenous women – who are usually responsible for selling in local markets – making an already vulnerable group more vulnerable (FAO and ECLAC, 2020b).

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*To avoid large crowds of people, **Cuba** restricted mass agricultural fairs where farmers go directly to offer their fresh produce.*

*The Ministry of Industry, Trade, Agriculture and Fisheries of **Jamaica** reports a reduction in the share of agricultural activities and food sales, which has a negative impact on the income of family farmers. They call on family farming to make the greatest effort to reach markets and encourage people to choose local products.*

*In the **Bolivarian Republic of Venezuela**, food delivery has been disrupted by national isolation. In the area of La Grita, it was normal for about 5 000 tonnes of vegetables to be shipped weekly. Today, these products remain in the fields due to lack of transport.*

*In the **Plurinational State of Bolivia**, fewer and fewer trucks are arriving at the points of sale: from 30 trucks with loads of up to 4 tonnes that were selling all their cargo, it went down to a range of five to eight trucks that did not even manage to finish off the entire harvest.*

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Sources: Cuba Debate, Ministry of Industry, Trade, Agriculture and Fisheries of Jamaica; France 24 and El País.

Something similar is happening with the national supply. The closure of localities, the lack of entry and exit permits for food transporters and the interruptions on the roads make it difficult for food to travel from the countryside to the urban wholesale and retail markets, causing a substantial loss in one of the first links in the chain: transport.

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*In **Peru**, producers in the Yungay area lost 6 000 tonnes of strawberries due to interruptions in transport to market.*

*In **Argentina**, during March, a ban was decreed on the movement of trucks, which, in the middle of the harvest period, could affect up to 100 million tonnes of food and cause serious logistical problems in reaching ports, storage sites or factories.*

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Sources: Revista Agronoticias, Letra P

## **b. Import and export**

Local and international markets have been affected by closures or access restrictions. Countries importing food from the region, such as China and the European Union, have ordered cordon sanitaire, preventing the landing of products or cancelling already agreed orders due to the closure of ports or fewer workers in them. As a result of these measures, a significant amount of fresh and perishable food – fish, seafood, fruit and vegetables, among others – will be lost, and very few can be recovered and reinserted into the supply chain.

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*For **Saint Vincent and the Grenadines**, an exporter of live lobsters, there are now connectivity restrictions between its transfer point, the United States of America, and destinations such as the Hong Kong Special Administrative Region of the People's Republic of China.*

*In **Guatemala**, mango exports to California, United States of America, have suffered shipment cancellations. Also, there has been a decrease in the number of containers available for shipping, as these have been accumulated because they cannot enter Chinese ports. There has been a fall in the prices of goods such as coffee (7 percent), sugar (21 percent), oil (24 percent) and bananas (3 percent).*

*In **Chile**, the daily restriction of food containers to China fell to a range between 40 and 50, compared to the 200 to 300 containers that were commonly received. The products most affected have been cherries, blueberries, wine and seafood.*

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Sources: St. Lucia News Online, Food News Latam and El Mercurio

## **3.3. Trade**

It is acknowledged that in situations of crisis or disaster, there is a phenomenon called "panic buying" or hoarding. This means shopping triggered by the beginning of quarantine and the fear of shortages. In other words, people buy more than they can consume in the short and medium-term.

The goods that make up the basic food basket are often the subject of panic buying. Hoarding leads to shortages and price increases for certain products. During this pandemic, this has happened to flour, eggs, vegetables and fruit.

A further consequence is that retail markets, as a response to panic buying, tend to be over-supplied with the most in-demand products. When buying patterns return to normal, there will be a stockpile of certain products in retail, wholesale and even rural markets. In the case of perishable products, significant loss will occur if storage or processing measures are not taken to extend their shelf life, which is particularly challenging for vegetables, fish and milk.

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*In **Mexico**, for the past few weeks, there was an atypical demand for eggs as a result of panic buying.*

*In **Guatemala**, corn was hoarded in March, which led to increases in its price. The reported areas were Catarina and Malacatán in San Marcos, Tactic and Alta Verapaz in the municipality of Sololá and Huehuetenango.*

***Chile** was forced to import more than 240 tonnes of legumes to cope with high demand and a stock shortage.*

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Sources: Infobae, elPeriódico de Guatemala and Radio Cooperativa.

Restrictive measures may also affect tenants and/or customers. The temporary or partial closure of markets has led many tenants to discard products that would soon expire. On the other hand, many consumers, especially those in risk groups, have been limited in their movement to markets by existing health measures.

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*In **Mexico**, some fruit shop owners discarded kilos and kilos of food due to lack of customers. In Mazatlán, Sinaloa, the tenants of a local market said that considering the fall in the number of products consumed – up to 80 percent –, it turns out that a large number of fruits, vegetables, dairy products and packaged foods, end up as waste.*

*The Great Wholesale Market of Lima, **Peru**, had to close partially due to the coronavirus. Of the 200 tests performed, 132 vendors in this supply centre tested positive for COVID-19.*

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Sources: Radio San Joaquin and PeruRetail

Also, with the closure of restaurants, dining rooms and schools, the demand for certain products has fallen, generating losses in initial links of the value chain.

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*In **Colombia**, compulsory isolation caused household consumption to fall substantially.*

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Source: El Tiempo

### 3.4. Consumption

The COVID-19 pandemic has changed food purchasing patterns. Consumers in many low-income countries are buying more basic, non-perishable carbohydrates at the expense of fruits and vegetables, resulting in perishable foods being wasted in markets (FAO, 2020).

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*According to a survey conducted in Brazil, vegetable consumption has decreased during the pandemic.*

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Source: Embrapa

Another problem that can impact on food waste is the disruption of school feeding programmes, which generally benefit children and young people from the most vulnerable populations. In some cases, there have been huge problems in getting food to households, wasting prepared rations and leaving millions of families without this aid.

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*Ten million students in **Latin America and the Caribbean**, whose main and almost only source of food was school meals, were put at risk as a result of school suspensions and quarantines in most countries in the region.*

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Source: El Mercurio

## 4. Recommendations to prevent food loss and waste



Evidence indicates – despite the limited data available – that reducing food loss and waste can generate both economic benefits and costs. As reduction options are exhausted, the cost increases. In other words, there is a level of food loss and waste that will always be unavoidable.

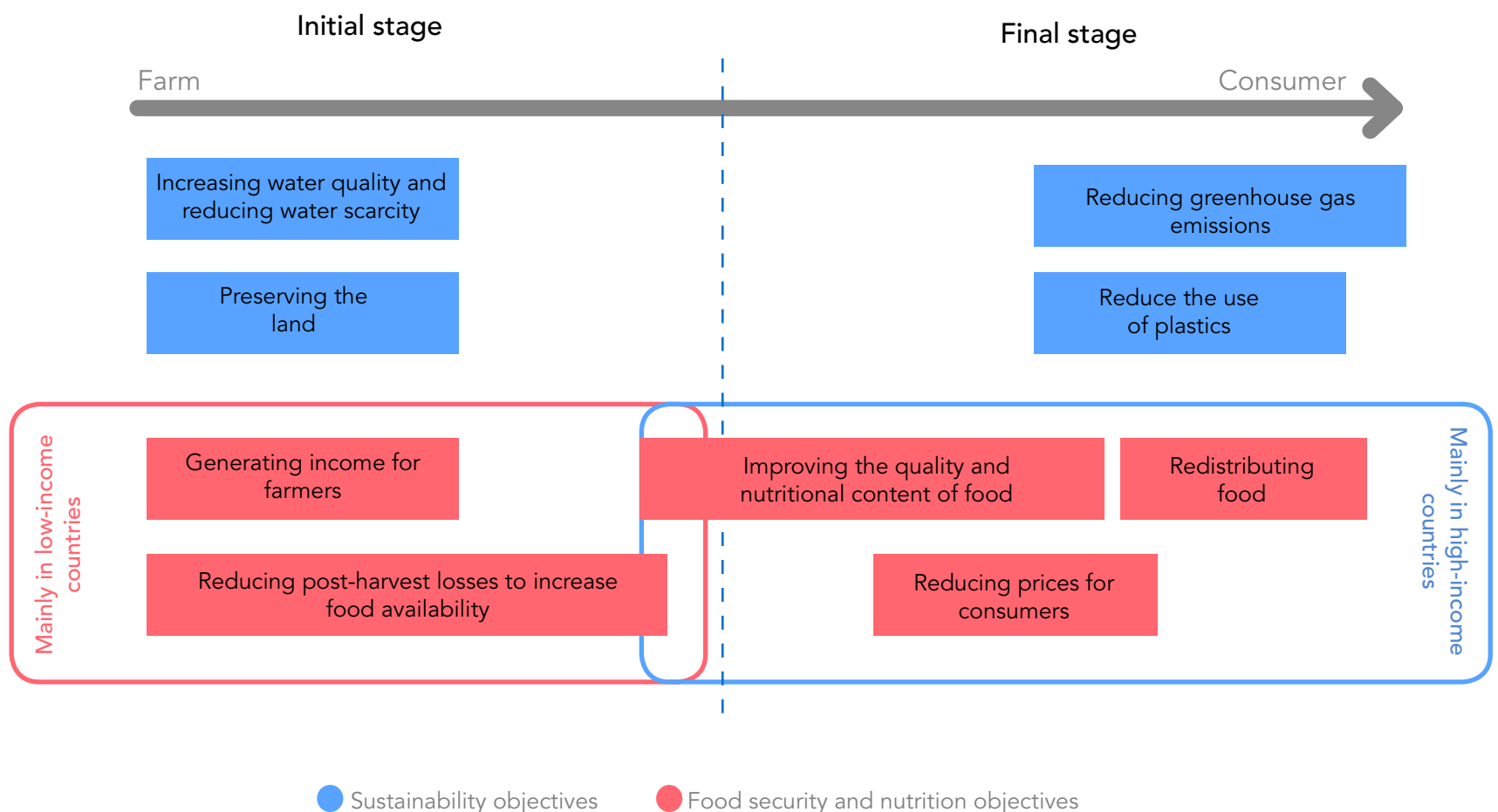
In any case, FAO does not recommend focusing exclusively on trade considerations when planning a comprehensive response to the problem. In addition to economic justifications, other considerations may motivate public sector intervention in food loss and waste, such as improving food security, nutrition and environmental sustainability (FAO, 2019).

Therefore, it is necessary to know where and why to design a policy or measure to mitigate food loss and waste. In the midst of such a pandemic, **the main concern of governments should be food insecurity.**

Reducing food loss or food waste can improve food security and nutrition, depending on where these groups are located and where the reductions are made. However, positive impacts on food security are not guaranteed and, in some cases, they may even be negative for some groups – farmers, for example (FAO, 2019).

Before the pandemic, better food security outcomes were achieved when food loss was reduced in the early stages of the supply chain, especially on farms in countries with high levels of food insecurity. On the other hand, reducing food waste at later stages of the supply chain can improve consumers' access to food, but farmers could be left worse off in terms of income and, therefore, food security (see Figure 2).

**Figure 3/** Objectives of measures related to the reduction of food loss and waste, and their points of entry into the supply chain before the COVID-19 pandemic



Source: FAO, based on FAO (2019)

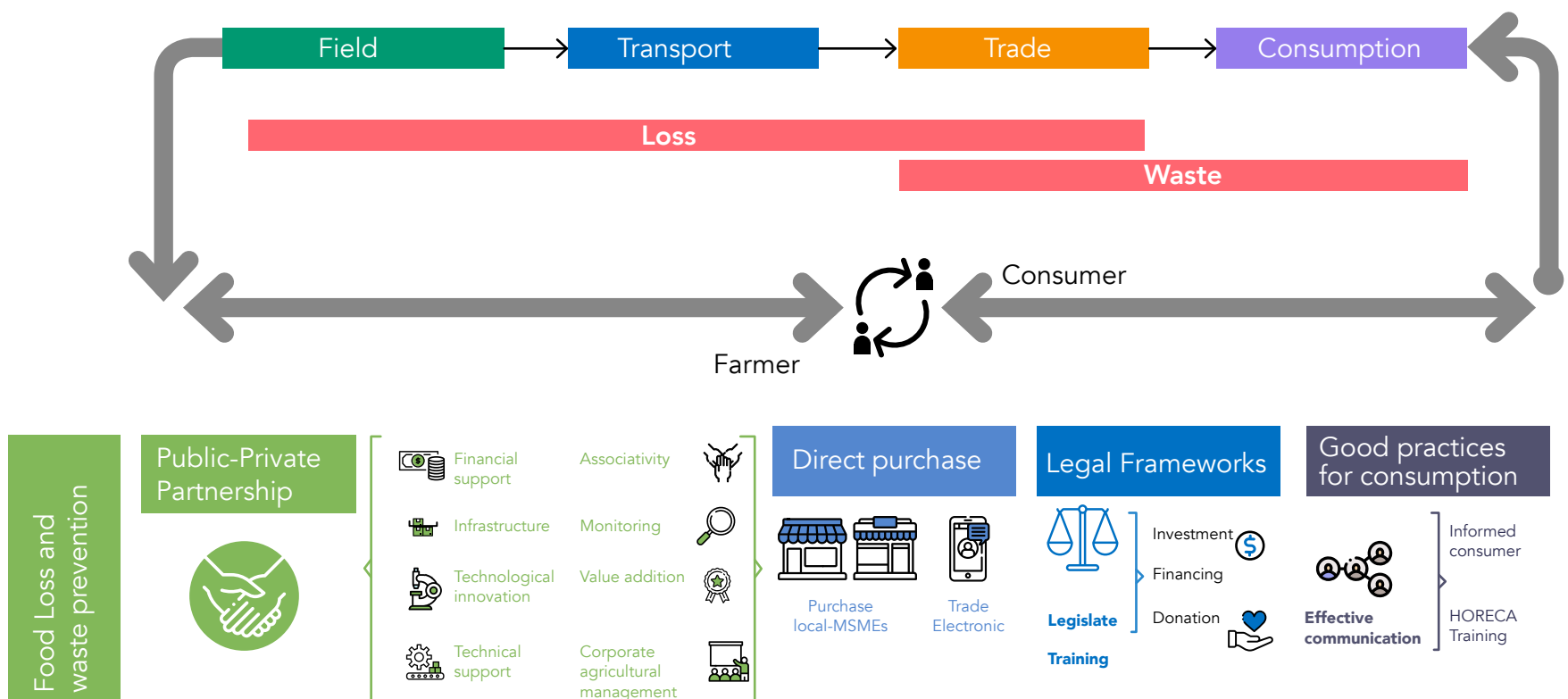


A qualitative analysis of the impacts of COVID-19 on the agrifood system indicates that the pandemic affects the entire value chain. Consequently, measures can be implemented to reduce food loss and waste, to improve food security along the chain and not only in the first links of the value chain in low-income countries, as was the case before the pandemic.

The pandemic forces the implementation of food recovery and redistribution programmes that can be implemented in the final links of the agrifood chain, especially in the higher income countries. Doing so can increase access to food and improve the diet of the food insecure, namely, help the most vulnerable populations in a critical way (FAO, 2020).

Figure 3 shows the impacts of COVID-19 on the agrifood value chain and the measures that can be taken to reduce food loss and waste.

Figure 4/ Possible impacts of COVID-19 on ELPs and measures to mitigate the impact



Source: FAO



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#### 4.1. Public-private partnership

Below are some ways in which public-private partnerships could help reduce food loss and waste along the entire supply chain:

- In low-income countries with high levels of food insecurity, measures should focus on the first links of the value chain in order to reduce food losses.
- Provide training, extension and financial support to farmers to help them increase their productive capacity and harvest the food produced quickly.
- Facilitate labour migration to ensure uninterrupted crop harvesting.
- Arrange access to health inputs to safeguard the health of farmers and field workers during the pandemic, and thus maintain a smooth supply chain.
- Support family farming with innovation programs and post-harvest infrastructure that help to better conserve food – with a focus on staple foods – and avoid losses associated with rural storage or transport.
- Restructure the packaging and processing activities. Today these activities are not viable unless physical distancing is respected. Otherwise, the risks of contagion increase considerably for workers.
- Exempt food transporters from curfew. This allows the transport of perishable food during the coldest times of the day and night to maintain quality and reduce food loss.
- Create mobile transport applications (apps) that reduce logistical problems in food distribution between countries.
- Update or generate indicators that measure increased transparency and reliability, as well as improve traceability and accounting for food loss or waste along the value chain. To this end, new technologies can be used or developed to optimize data collection and allow for real-time communication.
- Ensure that information on measures concerning trade, production levels, consumption and food stocks – as well as prices – is available to all in real time. This reduces uncertainty and enables producers, consumers and traders to make informed decisions. It also helps contain panic buying and hoarding of food and other essential items.

## 4.2. Direct purchase

- Ensure fluid access to markets for family farming, through consistent public policies and public and private funding.
- Organize the actors by proximity and integration of logistics services.
- Buy agricultural and smallholder products and establish strategic emergency reserves for humanitarian purposes, in particular for products whose international marketing has been disrupted, such as asparagus, coffee and cocoa, among others.
- Generate association spaces between farmers and training groups to add value to the products. Cover other market niches so that food has more options to be marketed.
- Ensure short market circuits, local marketing, through technological and communication innovations that allow grouping farmers in an area with markets and close population. This is just one of many possibilities for maintaining continuity of supply and preventing large losses of food from staying in the field.
- Encourage the establishment of productive alliances between family farming producers and companies that can inclusively market their products. These can be alliances for the development of technology that will allow them to market their products, improve supply, increase the availability of their products or initiate a process of digitalization of small producers (e-commerce).
- Improve internet connectivity in isolated rural areas.
- Relocate and establish temporary markets in rural, urban and peri-urban areas to facilitate consumer access to fresh food supplies and reduce market waste
- Stimulate or strengthen urban and peri-urban agriculture in national territories, giving rise to short production circuits.

## 4.3. Legal Frameworks

- Coordinate actors from the central government, municipalities and the agricultural sector, to avoid interruptions to food transporters, by granting permits and emphasizing controls on roads.
- Promote coordinated action between governments and other public and private actors to monitor and respond quickly to possible access restrictions in cases of foreign trade.
- Encourage public purchases by governments from small producers, mainly of perishable products, to distribute them to the most vulnerable population.
- Control access and avoid crowding in local markets, such as free markets, which are closer to the community. Moving them to more enclosed areas can improve health control, allowing market flow and access to food. It also helps to avoid variations in fresh produce stocks and possible massive food loss and waste during this crisis.
- Promote lower fluctuations in food prices by creating a list of fixed-price goods, or by implementing legal mechanisms that encourage price transparency and minimize information asymmetries.
- Simplify administrative procedures to encourage retailers and businesses to donate food.



#### 4.4. Good practices for consumption

- In high-income countries with low levels of food insecurity, interventions should focus on food waste, to reintegrate it into the supply chain and distribute it to the most vulnerable.
- Maintain clear, available and timely information on production, consumption, prices and marketing measures to avoid uncertainty, speculation and food hoarding.
- Strengthen public and private donation campaigns to food banks worldwide, which are preparing for increased demand.
- Coordinate governments with NGOs, food banks, civil society and the private sector, to strengthen logistics mechanisms and enable food from social protection or school programmes to be distributed to those who need it most, contributing to the development of resilience in communities in need.
- Create awareness campaigns to inform and persuade people of the benefits they gain from reducing food loss and waste.

#### 4.5. Communication campaigns

- Call on the population not to panic, assuring them that primary production will continue to operate, that wholesale and retail markets will continue to supply and that all necessary safeguards have been taken to avoid contagion in those places.
- Inform the consumer and recommend him/her to follow the appropriate food storage and processing measures to avoid waste at home (More information in 10 FAO tips to preserve your meals in times of COVID-19).
- Inform about methods to reduce waste generation, recycle, reuse, or compost.
- Revalue the local gastronomic culture, the consumption of seasonal products and the sustainable use of natural resources.

## 5. Relevant experiences in the region



### Mexico

#### *Mi Fruta, Mi Pueblo (My Fruit, My People)*

(<https://ar.socialab.com/challenges/SinDesperdicioMexico/idea/108301>)

**Keywords:** *zero fruit waste, educational program, technical strengthening, business strengthening, community bonding*

The *Mi Fruta, Mi Pueblo* project began in Zapotec communities on the Isthmus of Tehuantepec, Oaxaca.

Asunción Ixtaltepec, Oaxaca, is a village with a lot of fruit trees for self-consumption. However, most of them are wasted because the amount of fruit trees exceeds the consumption of them. These fruits are not processed or commercialized. There was no program to combat the annual waste of tonnes of fruits of several varieties, even though the food shortage and extreme poverty in the village are very high.

The initiative seeks to teach practical workshops and learning circles so that Zapotec women can learn fruit conservation techniques to transform them into innovative food products that not only meet their families' consumption needs but also allow them to generate additional income through production cooperatives. In these production cooperatives, product exchange or barter is promoted, fostering inter-community links and food diversification and complementation in the family diet.

Currently, the program initially benefits families in Isthmian communities in Oaxaca. In this area, the land abounds in fruit trees and other vegetable products, and also, more than 750 kilos per family are wasted during each fruit season, such as the mango season.

### Chile

#### *Soup kitchens in free fairs*

(<https://asof.cl/ollas-comunes-de-feriantes-de-pudahuel-entregan-600-almuerzos-cada-vez-que-se-organizan/>)

**Keywords:** *food recovery, zero loss, micro food bank, community solidarity, healthy eating*

In Chile, soup kitchens are a long-standing practice in the most popular sectors. These initiatives, in adverse situations such as earthquakes, floods, layoffs and, now, health emergencies, mobilize the population to gather all the available food. They bring it from their own homes or from donations from third parties and use it to prepare typical Chilean meals in a large pot that is shared with the community.

In Chile, the main way to access food in low-income populations is through free markets. Currently, there are more than a thousand fairs in the country, which have not stopped working during the health emergency.

The vendors - "caseros" and "caseritas", as they are affectionately called in Chile - wanted to support their customers with soup kitchens in their fairs or by bringing food to the places where these soup kitchens are organized, such as neighbourhood councils, family health centres (CESFAM, by its initials in Spanish), and other community groups organized to feed the population. Besides, they consider proposing to the organizations to create micro food banks in the free fairs to manage surpluses.

## Argentina

### Healthy Seasons. Adequate nutrition during the pandemic

(<https://www.buenosaires.gob.ar/desarrolloeconomico/desarrollo-saludable/estaciones-saludables>)

**Keywords:** *gastronomic capital, conscious eating, healthy season, professional concierge, recipes information, responsible consumption, digital service to the community*

Healthy Seasons is a programme aimed at promoting healthy habits, conscious eating, good consumption practices, and reversing obesity and overweight. In the city of Buenos Aires, a proposal was launched in the middle of the quarantine to be in contact with a team of nutritionists and to make consultations for a healthy diet. Although the healthy stations already existed before the COVID-19 pandemic, they have now been adapted and can reach the homes of neighbours.

This program is a free digital proposal promoted by *BA Capital Gastronómica* to connect the neighbours with a team of nutritionists. Through three available modes, citizens have a channel to clarify doubts, receive advice, learn new recipes, get information on preventive measures and anything else related to healthy living. The program is part of the Under-Secretariat for Citizen Welfare, which belongs to the Ministry of Economic Development and Production.

## Dominican Republic

### Fogones, gastronomía solidaria (Wood stoves, solidarity gastronomy)

(<https://www.instagram.com/fogonesgastronomiasolidaria/>)

**Keywords:** zero waste, chefs, hotels, restaurants and cafes (HORECA, by its initials in Spanish); public-private partnership

The *Fogones, gastronomía solidaria* movement is made up of an outstanding group of Dominican chefs, who organized themselves with the aim of distributing prepared food – a nutritious menu made with locally produced food, donated by public and private entities, distributed every two weeks – to vulnerable people and medical personnel during the COVID-19 crisis. The solidarity gastronomy days are organized by the Ministry of Foreign Affairs (MIREX, by its initials in Spanish), through its Dominican Gastronomic Diplomacy initiative, in coordination with FAO, the Dominican Food Bank and the IMA Foundation. For the preparation of these dishes and the food transfer, the chefs and staff involved are following the hygiene and safety measures suggested by the competent authorities to avoid the spread of COVID-19. With this initiative, the cooks, led by Inés Páez, Chef Tita, Gastronomic Diplomacy Advisor for MIREX, show their social commitment by cooking, as a way to raise awareness, contribute to food security and support local producers by working with surplus crops.

## Colombia

### Mobile Rural Markets of Bogotá's Municipality

(<https://bogota.gov.co/mi-ciudad/desarrollo-economico/cuarentena/mercado-moviles-llevaran-productos-los-hogares>)

**Keywords:** *short circuit marketing, zero loss, zero waste, fresh and healthy food*

The farmers' markets in Bogotá, Colombia, are an alternative model for the distribution of food produced in the rural areas of Bogotá and in the Central Region (which is made up of the departments near the city: Cundinamarca, Boyacá, Tolima and Meta). From this area comes nearly 80 percent of the food supplied to the country's capital.

Due to the pandemic, which makes it impossible to have food available for purchase and to have a flow of consumers willing to access it, the Mayor's Office of Bogotá created the initiative *Mercados Campesinos Móviles* (Mobile Farmers' Markets). This consists of mitigating the current economic and marketing difficulties faced by the farmers, by providing alternatives for marketing and pre-sale of products with home delivery. Therefore, the initiative contributes directly to the food supply of the capital's citizens without them having to leave their homes, and to the improvement of farmers' income, by reducing the number of intermediaries, and promoting the consumption of fresh and healthy food.

This type of commercialization strengthens the field level and prevents the generation of waste. In addition, it promotes fair trade, thanks to which producers obtain greater profits and the consumer has access to food at a lower price compared to neighbourhood stores or large surfaces.

### School Feeding Program

[https://www.mineducacion.gov.co/1759/articles-395386\\_archivo\\_pdf.pdf](https://www.mineducacion.gov.co/1759/articles-395386_archivo_pdf.pdf)

**Keywords:** *school feeding, zero waste, food safety*

The School Feeding Programme (PAE, by its initials in Spanish) is one of the main strategies in Colombia to have a positive impact on the welcoming, well-being and permanence of children in school, particularly those living in poverty and located in rural areas. It is aimed at improving health by providing a food supplement that contributes to the comprehensive development of children, adolescents and young people.

The modalities that previously operated face-to-face have had to be readjusted to meet their objectives. To this end, the programme has implemented modifications aimed at favouring food safety and the prevention of food waste.

To meet the challenge of waste in a timely manner, they took swift action to mitigate the effects on the processes involved in the food supply. To this end, the decision was taken to immediately deliver the food to the families of the schoolchildren for preparation and consumption at home, complying with handling and quality protocols. This was done in less than a week, which reduced waste in the territories.

The second challenge, ensuring the continuity of school meals, was taken up by implementing a single basket of non-perishable food for delivery to each PAE beneficiary, which favoured full consumption within the home. To that end, the respective recommendations for the storage, preparation and consumption of the components in different modalities were given to the father or mother, or the person who attended the meeting. It should be considered that the delivery may be weekly, fortnightly or monthly, as defined by the territorial entity.

### The Rescue. Nothing is lost, everything is transformed

(<https://www.facebook.com/El-Rescate-Nada-se-pierde-todo-se-forma-116992003373019/>)

**Keywords:** *zero waste, sustainable gastronomy, food rescue, circular economy*

*El Rescate* is a company that involves a circular economy in mission to achieve the prevention and reduction of food balances in retail distribution in the city of Bogota, transforming them into desserts and homemade recipes. These food rescues and transformations contribute to the reduction of environmental footprints by preventing them from ending up in the Doña Juana landfill site, where they generate greenhouse gases; and culturally, to rescue preparations and promote sustainable consumption.

It was born from the reflection on the problem of food waste in Colombia, where, according to the latest estimate, 2.01 million tonnes are wasted in retail and 1.53 million tonnes in food consumption (DNP, 2016). Motivated by the daily waste of food in the cities – in this case, Bogota –, they wanted to find a solution to waste and, at the same time, help to achieve a sustainable future.

In addition to the mission of *El Rescate*, during the pandemic, they have generated resilient strategies in the gastronomic sector, where part of the rescued food is donated in the form of healthy markets to vulnerable families and to affected cooks, so the venture also contributes to mitigating the social effects of the pandemic.

## Costa Rica

### Alimentalistas (Feeders)

(<https://www.alimentalistas.org/>)

*Alimentalistas* is a citizen initiative that seeks to give food the value it has lost in recent times. Motivated by the respect for food, it carries out processes of awareness and "rescues", which consist of the collection and distribution of surplus food that, for aesthetic control or other reasons, is left without a destination. The rescued food is classified and delivered to social organizations.

*Alimentalistas* is a bridge between the applicant and the receiving person, helping to ensure that food in perfect condition is taken advantage of and does not end up in the garbage. During the pandemic, the organization expanded its operational reach with a platform to channel donations to those most vulnerable to face the emergency. It also modified its rescue protocols to ensure the safety of volunteers and all those involved in the distribution chain.

In the face of the disruption of local, regional and global food supply chains, *Alimentalistas* is working to ensure that there is a better distribution of abundance and that food is harnessed. The health situation has put a spotlight on the inefficiencies and inequities of the food system and forces a redefinition of how all social actors value food. This presents an opportunity to promote a dialogue based on more responsible and sustainable food consumption.

*Alimentalistas* intends to take advantage of this turning point to reinforce the message of waste prevention at the individual, collective and industrial levels.

Additionally, *Alimentalistas* is a member of the Costa Rican Network for the Reduction of Food Loss and Waste and, together with other entities in the country, has contributed its experience and knowledge to promote the construction of food donation guidelines in the context of COVID-19.





## 6. FLW-related experience interviews



**Germán Sturzenegger**  
Coordinator  
Inter-American Development Bank (IADB).  
Washington, United States of America



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### What is the purpose of the platform?

#SinDesperdicio is a platform of partners, including FAO, committed to reducing food loss and waste in Latin America and the Caribbean. The platform's objective is to make visible and activate the food loss and waste agenda based on four lines of action:

- i) the identification and financing of innovative solutions;
- ii) the design of public policy;
- iii) the generation of statistics and knowledge; and
- iv) the promotion of responsible production and consumption behaviour throughout the chain.

### How is the reduction of food loss and waste perceived since the platform was launched?

Since its launch in October 2018, #SinDesperdicio has fulfilled its goal of making visible and seeking solutions to food loss and waste. It was behind the organization of the First Regional Summit on the Reduction of Food Loss and Waste, which took place in Bogotá, Colombia, in October last year (<http://www.fao.org/americas/eventos/ver/en/c/1208556/>).

Through a series of innovation competitions, first in Argentina and Mexico, and soon in Central America, it has identified and supported the ecosystem of entrepreneurs working on this issue. It is supporting the efforts of governments, in Argentina for example, in the definition of national strategies to reduce loss and waste. It is financing the implementation of anti-waste solutions for key actors in the chain, such as marketplaces and supply centres. It is supporting the Colombian government's quantification efforts and identifying those market failures that explain why we lose and waste almost a third of the food we produce for human consumption.

### What actions to reduce the effects of COVID-19 on food loss and waste have been taken?

Food banks are a strategic ally of #SinDesperdicio; they are playing a key role in food security. In this context of crisis, banks are facilitating access to food for thousands of families affected by the pandemic. Through the Global Network of Food Banks, we have channelled financial support to several food banks in Mexico, Colombia and Chile. This support will be used for the purchase of food and supplies that the banks need to operate. In some of these countries, the demand for food banks has increased by 200 percent. It is important to be able to support them in this situation.

### What opportunities do you identify, based on these actions, for post-pandemic recovery?

The pandemic has highlighted the great contradiction of losing and wasting food in a context where millions of people are severely food insecure. Reducing loss and waste is part of the solution to the growing challenge of food insecurity we face as a region. If we do not understand this, we will miss an enormous opportunity to change a model of production, supply and consumption that has huge inefficiencies and negative social, environmental and financial impacts. The pandemic should be a turning point and an accelerator of trends. An opportunity to think about a food system with much lower levels of waste.

**Dra. Marcela Villegas**  
Director of Innovation  
Mexico City's Wholesale Market



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### **What is the objective of the collection centre for food recovery (ITACATE, by its initials in Spanish) at the wholesale market (CEDA, by its initials in Spanish) in Mexico City?**

ITACATE aims to: reduce food waste in the wholesale market, collecting and recovering food, and distributing it to public or private institutions, human groups or individuals, who then distribute it equally among more unprotected families or population sectors.

### **How is the reduction of food loss and waste perceived since the implementation of Itacate?**

The operation of ITACATE has had a very positive impact among the participants of CEDA, and in a sector of vulnerable population of Mexico City; since the implementation of ITACATE, 113 656 tonnes of food were collected. The donations received were delivered to the Secretary of Inclusion and Social Welfare in order to provide prepared food through soup kitchens, benefiting more than 30 000 people in a situation of food shortage.

There are 113 656 tonnes of food suitable for consumption that have not been deposited in the wholesale market's organic waste containers.

That means 113 656 tonnes of food that did not become organic waste.

Participants who no longer sell a product on the days they believe it has the quality to be sold, deposit it in CEDA's organic waste containers. Currently, these goods are donated to ITACATE.

### **What actions to reduce the effects of COVID-19 on food loss and waste have you taken?**

To reduce food loss at CEDA, telephone contact and visits to participants requesting food donations have been strengthened.

There was a decrease in sales, which brought about an increase in food donations (from 20 March to date 80 tonnes of food have been received in ITACATE).

### **What opportunities do you identify, based on these actions, for post-pandemic recovery?**

In order to reverse this situation, measures must be promoted to avoid food waste by generating recovery schemes that guarantee equal rights. Nutritious, sufficient and quality food will result in a better-fed population.

Actions should be proposed that involve all CEDA actors and build a real agenda with management that strengthens the recovery and effective use of food.

Participants should build a culture of food donation and effective use.

Food models and consumption patterns will have to change, prioritizing the consumption of fruit and vegetables, among others. This will increase the sale of these food items.

**Juan Carlos Arriagada**  
Executive Director  
Chilean Food Market Observatory Corporation  
(CODEMA, by its initials in Spanish)



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### **What is the objective of CODEMA?**

CODEMA is a corporation that brings together the members of the agrifood and fishing channel, made up of agricultural producers' organizations, the association of artisan fishermen and the association of free fairs, as well as representatives of consumer organizations.

### **What actions to reduce the effects of COVID-19 on food loss and waste have you taken?**

We have been monitoring the situation of our leaders throughout the country in times of pandemic. They tell us that, as a result of the health emergency, an increased number of people go to the fairs to "rescue" food that will not be marketed because of some aesthetic defect. Besides, the fairs themselves have helped by delivering food to soup kitchens, both fruit and vegetables as well as fish and seafood, thus reducing food waste to almost zero.

In this activity we see an opportunity to systematize the experience and formalize it in such a way that it can continue to be implemented post-pandemic; to do so, we are proposing to create micro food banks in the free fairs: a special stand where, during the operation of the fair, food is deposited so that people can withdraw it in a dignified, safe and orderly manner.

**Juan Carlos Martínez**  
Managing Director  
Special Administrative Unit for School Feeding, Colombia



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### **What is the objective of the School Feeding Programme (PAE, by its initials in Spanish)?**

The PAE is one of the main strategies that have a positive impact on the welcoming, well-being and attendance of school, particularly for children living in poverty and located in rural areas. The programme is committed to strengthening their health through the provision of a food supplement that contributes to the comprehensive development of children, adolescents and young people registered in the official registry, promoting healthy eating habits, and guaranteeing quality, timely and comprehensive care based on local needs.

### **What challenges did the Special Unit for School Feeding face in order to fulfil its objective in the current pandemic situation?**

It faced great structural, operational and logistical challenges, such as:

- Change national regulations to mobilize resources for the operation and coverage of services in the new social and economic circumstances, and considering physical distancing.
- Immediately generate national regulations and guidelines applicable to the country's diversity, which at the same time favour territorial autonomy.
- Modify contracts and territorial management in order to adapt to the new operation conditions.
- Reorganise promptly the supply scheme in line with the objective of the School Feeding Programme and the guidelines and directives issued by the national government on the occasion of the COVID-19 pandemic.
- Adjust feeding modalities that maintain nutritional intake and are articulated with pandemic isolation protocols.
- Provide greater technical assistance to local authorities in the technical, contracting and operational aspects of implementing the PAE in the territory.

- Achieve an effective articulation with the territorial dynamics within the framework of the Health Emergency; to this end, each territorial entity designed its delivery and distribution route and the protocols that favoured physical distancing, the participation of teachers and rectors, and the targeting of beneficiaries if required.
- Achieve an articulation of different social dynamics and linkage of the educational community in supporting the implementation of the PAE.

**Within the challenges involved in institutional food consumption, how does the Special Unit for School Feeding address food waste in the current pandemic situation (both supply and consumption processes)?**

The first challenge in terms of loss and waste prevention involved generating immediate guidelines and instructions for distributing the food that reached the educational institutions when the emergency was declared and ordered to be quarantined. The decision was made to immediately deliver the food for home consumption to the families of the schoolchildren and in compliance with the protocols for handling and quality. This was done in less than a week, which reduced waste and loss throughout the territory.

The second challenge was to implement a single basket of non-perishable food for delivery to each PAE beneficiary. This favoured a complete use of the food within the home, and a judicious exercise in organization and logistics for the location and distribution of the rations in their different modalities to the families of the children, adolescents and young people. The process of refocusing implemented by the territorial entities to reach the families of the most vulnerable students during the period of recess decreed by the national government is highlighted here and served the education sector to prepare flexible models for learning at home.

We would also like to highlight the guidelines and directives that are regulated in the Operation of the PAE for the adequate management and use of surpluses, redistribution when there is a surplus of rations, and refocusing of beneficiaries.

Through the guidelines issued by the Special Unit of School Feeding – Food for Learning –, it has been established that the territorial entities, in the exercise of their administrative autonomy, can carry out effective processes of targeting the supplement supply, in order to really know the students who require this supplement and avoid generating waste.

Similarly, the territorial entities provide the parent or guardian with recommendations for the storage, preparation and consumption of the components of the different modalities, bearing in mind that the delivery may be weekly, fortnightly or monthly, as defined by the territorial entity.

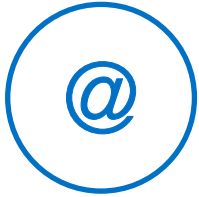
The territorial entities, within the framework of their administrative autonomy, can propose adjustments or changes in the minutes of the different modalities: ration to be prepared at home, food voucher or industrialized ration; through the professional in nutrition and dietetics, in such a way that the nutritional contribution is preserved and food is included in the different groups responding to the availability of food, eating habits and encouraging local purchase, taking into account the current territorial production.

**What opportunities do you identify from the actions of the Special School Feeding Unit for post-pandemic recovery?**

Among the opportunities, the need has been identified to strengthen the linkage of the educational community, allowing for greater social participation around the School Feeding Program, as well as effective communication and socialization of the program at the territorial level, including the perception of parents and students regarding the PAE in different operating conditions.

At the operational level, it is necessary to continue with the formulation and implementation of public policy on school feeding. This policy, through the identification of risks, will allow the adjustment of technical guidelines with a territorial approach, under the premise of continuous improvement.

## 7. Resources



As in all the issues of this series of bulletins, we offer you different sources of information available on the web that may be useful to complement the topics covered in this edition.

### Wooden stoves, solidarity gastronomy

<https://www.youtube.com/watch?v=zhp7lwHYstE>

An exemplary public-private partnership initiative that seeks to promote healthy eating and local production in the Dominican Republic.



### Mobile Markets

<https://bogota.gov.co/mi-ciudad/desarrollo-economico/cuarentena/mercado-moviles-llevaran-productos-los-hogares>

Pilot plan for the distribution of food produced in the rural areas of Bogotá and the central region. The initiative aims to mitigate the current economic difficulties faced by farmers.



### Kitchen soups in free fairs

<https://asof.cl/ollas-comunes-de-feriantes-de-pudahuel-entregan-600-almuerzos-cada-vez-que-se-organizan/>

An initiative that allows to manage food surpluses and to use them to prepare a big pot of food in free fairs. In Chile, soup kitchens are a long-standing practice for bringing food to vulnerable populations.



### Feeders

<https://www.alimentalistas.org>

A citizen's initiative in Costa Rica that seeks to restore the value of food. They "rescue" food: they withdraw and distribute surplus food that, for aesthetic control or other reasons, is left without a destination, and give it to social organizations.



### My Fruit, my people

<https://ar.socialab.com/challenges/SinDesperdicioMexico/idea/108301>

A community initiative in Oaxaca, Mexico, that seeks to combat fruit waste and promote zero hunger through education, technical and business strengthening, and community outreach.



### How to extend the shelf life of fruits and vegetables

<https://www.inia.cl/blog/2020/03/30/ante-cuarentena-por-coronavirus-sepa-como-extender-vida-util-de-frutas-y-verduras/>

A note with recommendations for food preservation at home, which emphasizes that implementing simple measures, for example not damaging live products such as fruits and vegetables and having clear storage temperatures at home, is the starting point for extending the shelf life of fruits and vegetables.



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