

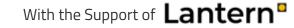


EIT Food Foresight: Impact of COVID 19 on the Food Sector in Southern Europe

Lantern | Madrid | 28.10.2020



EIT Food is supported by the EIT



### Table of contents

•	About This Study	03
•	Impact of COVID–19 on the Agrifood sector	11
	Primary Sector	17
	<ul> <li>Food Production and Supply Chain</li> </ul>	24
	Food Service	31
	• Retail	40
	R&D and Innovation	45
	<ul> <li>COVID – 19 Impact by Country</li> </ul>	50
•	Future Agrifood Scenarios	57
	Introduction	58
	<ul> <li>Short-term Scenarios: During COVID – 19</li> </ul>	65
	<ul> <li>Medium-term Scenarios: Post COVID – 19</li> </ul>	83
•	Summary	104
•	Annex	106





## About This Study

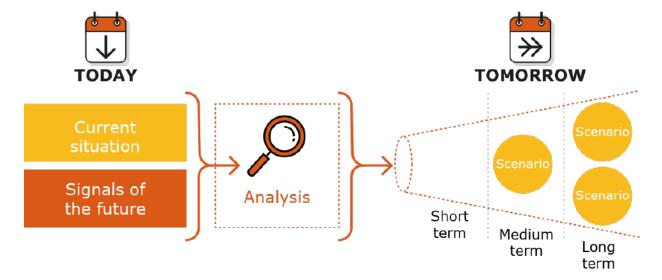


# The objective of this study is to provide some tools to help analyse and alleviate the current situation

We are living in strange, changing, and turbulent times. The unexpected has impacted us in many ways and certainty eludes us. The agrifood sector, one of the most essential to our survival, has suffered like no other from the confusion, stress, and pressure.

This document, funded by EIT Food, tries to give the sector a tool that can help its businesses navigate these turbulent waters.

This work analyses COVID-19's past, present, and future impact on the sector. We have analysed the main current signals that can help us visualise the possible futures and scenarios. This has helped us to identify the possible strategies for success in the case of each scenario becoming a reality.





### The analysis is divided into 6 areas







## The scope of this study is southern Europe, with a special focus on 5 countries





## To complete the study, we interviewed 19 experts in the agrifood sector



Director of Innovation Pestana Hotel Group



Nuno Bastos Supply Chain Director Intermachê



Rui Catalão Co-founder Kitchen Dates



Olga Matias SkunkWork Projects Mendes Gonçalves



Portugal



7

## To complete the study, we interviewed 19 experts in the agrifood sector





Sotiris Koutsomitros Consultant Greek Young Farmers Association



Yiannis Georgakellos Director of Corporate Affairs Athenian Brewery



George Kapsis Marketing & Communication Manager OK Markets



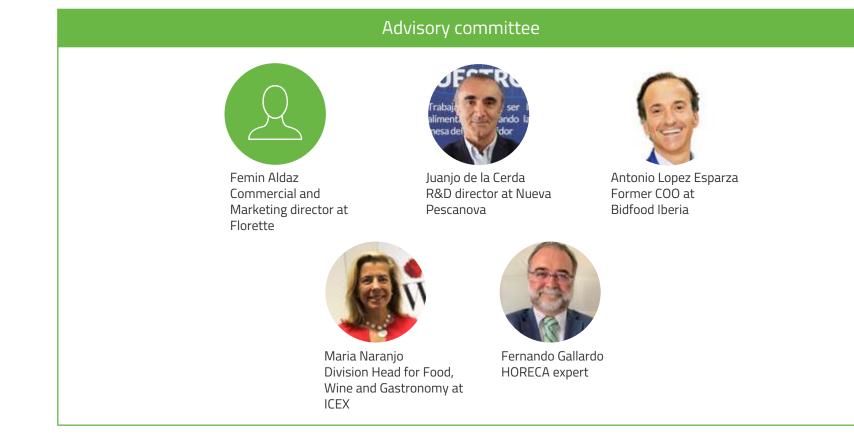
Agapi Doulgeraki Researcher ITAP

 $Faruk Boyaci \\ Faruk Boyaci \\ Faruk Boyaci \\ Swner \\ Sirkeci Hotel \\ Faruk Boyaci \\ Swner \\ Sirkeci Hotel \\ Faruk Boyaci \\ Sirkeci Hotel \\ Faruk Boyaci \\ Swner \\ Swmer \\ Sw$ 

Greece



### We also conferred with an advisory committee





## In addition, we consulted several public resources











All the references are available at the end of the document



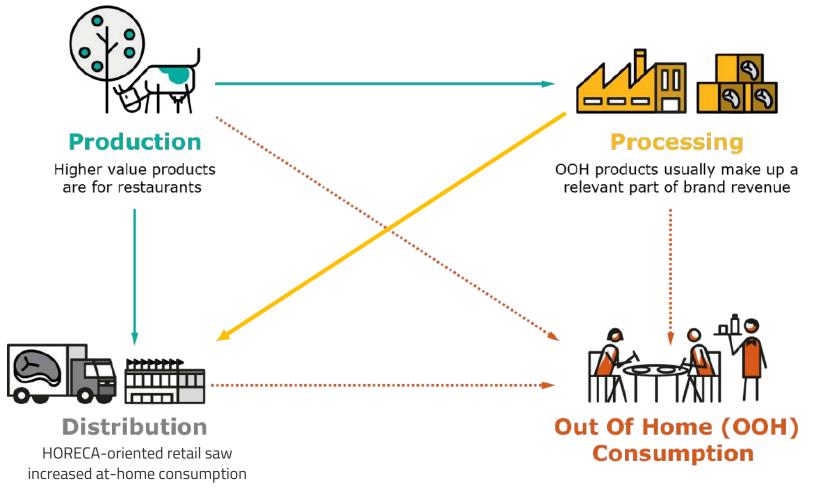
### Impact of COVID–19 on the Agrifood Sector



## Decline in out-of-home consumption is the main influence on the sector

Change in one area of the chain leads to implications across the industry

Food





### The agrifood sector saw major mindset changes and became much more resilient



#### Before COVID-19

#### Aversion to change

• Changes were slow and difficult to implement in a traditional sector

#### During COVID-19 lockdown

- The whole chain made fast and urgent changes with a strong positive impact
- Agility and adaptive capability in an uncertain environment has been and will be key to survive

#### New approach to bottom line

• Bottom line was focused around monetary earnings

- The sector united and focused its attention on the common benefit in the face of external danger. Companies prioritised the well-being of their employees and consumers above immediate economic benefits
- Focus on very short term targets; medium term and long term strategies under revision

#### Broader cooperation

 Limited collaboration outside immediate sector



- In general, there is a significant level of cooperation and collaboration between different entities and organisations
- Producers and retailers reinforced their relationships through close collaboration during the early chaotic moments of the lockdown, where the main goal for both parties was to prevent shortages

# Employee safety was prioritised, as food safety is already implemented



### Employee safety

- We are seeing an evolution from food safety to a broader scope which includes employee health
- Most companies implemented new measures to keep factories open and workers safe at the same time
- Quality assurance programs begin to include this approach

### Customer safety

- Businesses in direct contact with consumers implemented hygiene and safety measures such as masks, hand sanitiser, and glass panes
- On the other hand, these measures prevent consumers from feeling comfortable and discourage more regular visits
- This is particularly significant in food service as many government measures focus on these establishments and paint an unsafe picture of them



## There are some factors that will have a relevant impact in the future of eating habits



Remote working and unemployment will lead to more meals at home



More home cooking as an alternative to restaurants and due to the impact of the crisis



Home delivery is growing fast as an indulgent and convenient family treat. It is also convenient for remote working

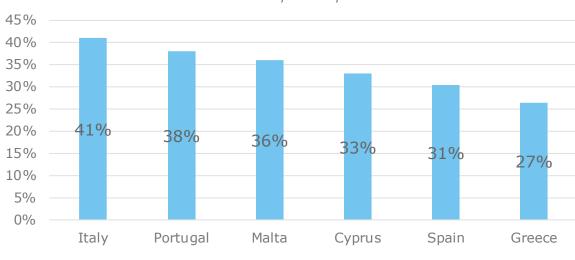


More health-related nutrition with new dimensions (vitamins, immunity...)



### Remote work is here to stay

- The impact on consumption is still unclear as there is not a consistent level of adoption across industries, but it will be significant
- There are still cultural barriers in some countries such as Greece or Turkey, and not all jobs are able to be done remotely (e.g. cashiers, factory workers)
- Business travel will experience significant decline as remote meetings are normalised
- Nonetheless, face-to-face interaction in the office between co-workers, as well as clients and providers, is seen as critical for collaboration







Source: Eurofound April-May 2020

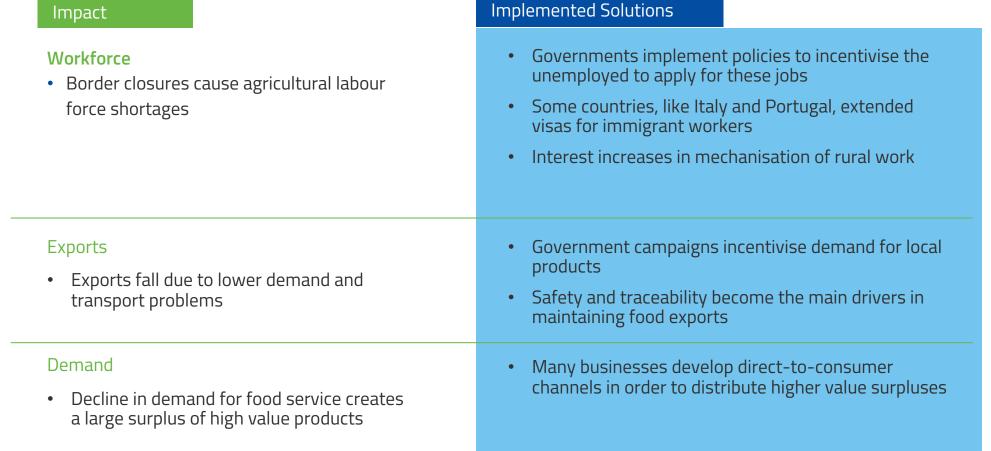




## Primary Sector



# The primary sector suffers due to lower demand and labour shortage





## Italy and Portugal facilitated access to permits for migrant workers in order to regularise their rural workforce

Italy to grant residence to undocumented migrant workers during coronavirus crisis



People demonstrate for migrant farm workers' rights in Puglia in 2018. Photo: Roberto D'Agostino/AFP

The Italian government on Wednesday decided to temporarily regularize undocumented migrants working in the agricultural sector or as domestic helpers, to fill key jobs and allow workers health coverage amid the coronavirus pandemic. Portugal Grants Migrants and Asylum Seekers Full Citizenship Rights During COVID-19 Outbreak

April 2007 Scheriften in son dally reveal digits?

Threesands of

**Complaints** Over

**Cancelled** Trip

Lawrenbourgians File

Aviation Bodies Call on EU to Replace

Testing, to Help Families Reunite for

Winter Holiday Sense

Quarantine With

Spain Extends Schungen Border

Classer Until Octob



and anylum seekers userently in the montry fall citizenship rights.

country, and therefore reduce the make for public builth.

pertoinence in National Teoritary."

rights of reignants must be guaranteed.

The move has been taken in onlist to permit these categories to have hall access to

According to the council, the more will an equivocally guarantee the rights of all the

country's healthcare as the outbreak of the nervel Cononavitrus recalates in the

Foreign citizens that have penaling applications autorited at the Portuguese

intrigration office until June 30, as these persons are "in a attainint of orgalar

People should out be deprived of their sights to health and public service just

Because their application has not yet been processed," Claudia Wrisso, spekersones

for the Ministery of Internal Affairs said adding that in these exceptional times, the



100% onlin

Latest News



Cyprus Removes Lithuania From Its COVID-19 Safe Countries List

Charry of University market (area must present a hepithermust of the Constraints here, or Optical Ministry,



"Not all has been bad. It gave us an opportunity to see how much mechanisation could be developed"

Daniele Rossi, Research & Innovation Delegate at Confagricoltura



# The need for mechanisation and rural workforce reform is becoming more evident

- Agricultural labour experienced structural issues due to its physical intensity and dependence on migrant workers
- Strict border controls and temporary closures had negative implications on the gathering of produce
- There is still room to increase the mechanisation and modernisation of current machinery (especially to reduce their environmental impact) in areas such as mechanical gathering or animal feeding, but barriers exist:

## Three main barriers to higher mechanisation in agriculture



Mechanisation requires heavy investment

#### Size

Most rural business are small: either family-run or consisting of just one person

#### Culture

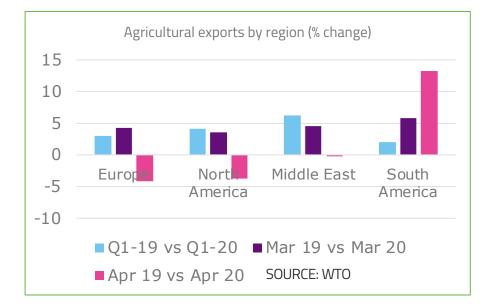
This is a traditional environment primarily run by older adults



### Effects of lower demand on the primary sector

### **DECLINE IN EXPORTS**

The global crisis caused a decrease in demand and difficulties transporting goods, leading to a notable fall in exports.



#### FALLING DEMAND FOR PREMIUM PRODUCTS

Government restrictions and consumer hesitancy around food service establishments creates a large surplus of high-value products.

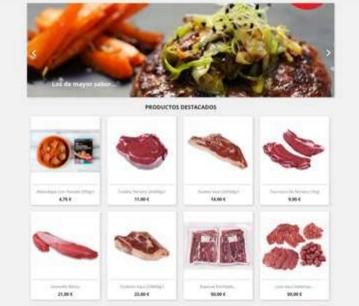




# Direct-to-consumer initiatives are implemented but their complexity makes them temporary

- Local initiatives to develop direct-to-consumer (DTC) channels in order to sell surpluses have been established, but the experts interviewed do not expect continued development of these channels, as local producers lack key skills which are not currently part of their business models
- DTC shortens the food chain, but the logistics are complicated and difficult to manage by a sole producer
- The channel is better suited to high value products, and not fresh produce or products with a short shelf life
- Growth will depend on the progress of online platforms and last mile initiatives





Spanish cooperative Baserria KMO developed a DTC channel in order to sell higher value meat products originally intended for restaurants





## Food Production and Supply Chain





# Changes in consumer demand and a tighter supply chain are the main impacts on the food industry

Impact	Implemented Solutions
Demand has changed	
<ul> <li>Less out-of-home consumption occasions increase opportunities for at-home ones</li> </ul>	<ul><li>Brands emphasised at-home consumption</li><li>More DTC initiatives from brands</li></ul>
Home cooking increases	Agreements with delivery platforms
Meal delivery increases	
<ul> <li>Less impulse and more control over spending</li> </ul>	
<ul> <li>Food service closers affect a significant percentage of demand</li> </ul>	
And so has supply	• The number of providers per company increased
<ul> <li>Procurement was at risk, although in southern Europe the amount of out-of-stock events on supermarket shelves was generally very low</li> </ul>	HORECA providers had to search for B2C producers
	<ul> <li>Security of supply is prioritised over rigid cost-saving flows such as JIT</li> </ul>
<ul> <li>Companies are rethinking key business elements to maintain profitability, such as payment terms and conditions, minimum orders, lead times, number of orders per day/week, and customer segmentation.</li> </ul>	• Factory worker safety is prioritised, partially due to the risk of closing in case of outbreak

In Spain, consumption habits radically changed during pandemic

-32.4% Out-of-home meal consumption on weekdays

> +6.4% At-home cooking

+31.5% Food delivery and takeaway

SOURCE: Kantar, August 2020

## Brands highlighted at-home consumption moments in order to offset some of the lost food service sales

Heineken – the wait is over



A Champions League game at home is the perfect occasion for an ice-cold Heineken.

#### Lay's – the good things remain



Aperitif doesn't have to be enjoyed on the terrace of a restaurant. Enjoy Lay's while social distancing.

#### Schweppes – imperfect serve campaign

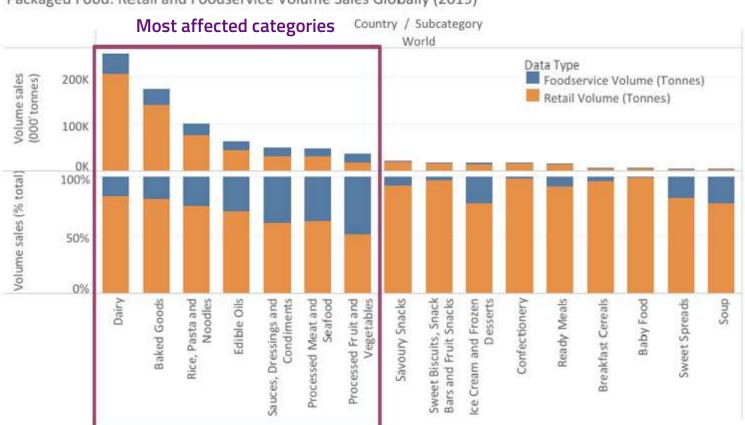


Schweppes reminds us of other occasions for a gin & tonic, even when bars are closed.



# Not all food categories are suffering in the same way from food service closures

Certain categories have a significantly higher share in food service than in retail, such as dairy and processed fruit and vegetables. They are much more vulnerable to surplus issues and unforeseen changes in demand.



Packaged Food: Retail and Foodservice Volume Sales Globally (2019)



# Digitalisation, traceability, and Blockchain implementation need a push

- Traceability is now a must in the supply chain, especially for exports
- Blockchain will gain relevance in the short term due to its implications in traceability, and related initiatives will be accelerated
- Real time information will be essential for making better decisions as demand forecasting becomes increasingly difficult
- Manufactures and retailers should move towards more integrated information systems
- Digitalisation of the supply chain will be accelerated, and those that are not integrated will find it difficult to participate and compete
- Cybersecurity becomes a more relevant concern as most business activity moves online





## DTC channels are developed and some mental barriers are broken

- Many medium and large brands reactivated online platform projects to respond to rising demand and supply chain problems
- The fear of angering retailers was left behind and there were no negative reactions from the sector
- DTC channels provide relevant information and stronger communication tools
- The greatest challenge will be keeping this channel open while maintaining relevance and profitability
- There are still problems in international e-commerce, where regulations and logistics make it difficult for small businesses to operate



In the Portuguese market, Danone, Unilever and JMDB, partnered to make their brands available on Glovo and Uber Eats delivery platforms. Consumers will have access to brands like Hellmann's, Knorr or Ben & Jerry's in less than 30 minutes.

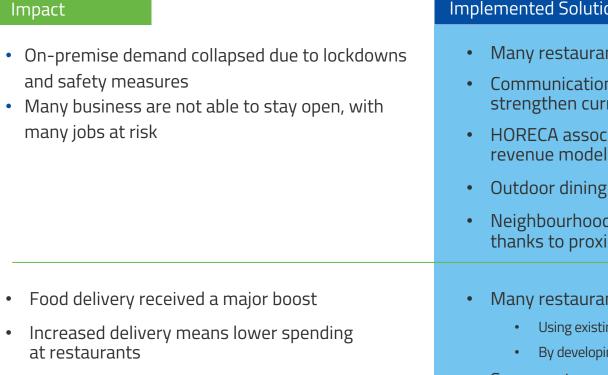




## Food Service



## Collapse of demand and surge in delivery are the main impacts on food service



#### **Implemented Solutions**

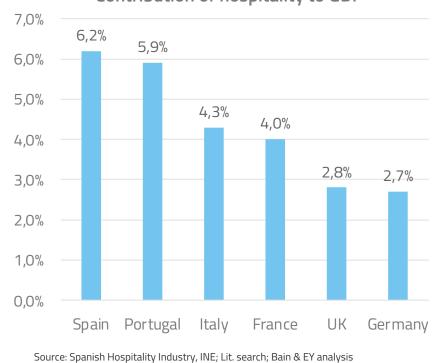
- Many restaurants developed new revenue streams
- Communication with customers is increased to strengthen current relationships
- HORECA associations increased training in new revenue models
- Outdoor dining becomes a must
- Neighbourhood restaurants manage the impact better thanks to proximity to consumers
- Many restaurants have started delivery service
  - Using existing platforms
  - By developing their own platforms
- Some restaurants have developed dedicated offerings for this channel



## Lockdowns and COVID-related limitations have placed the food service industry in a difficult situation

- A lot of small businesses will struggle to keep their doors open
- Unequal impact on chain and independent restaurants: chains have greater financial and professional resources, allowing them to adapt more quickly and effectively. Independent restaurants will have to collaborate with peers to achieve similar capacity
- Treasury management: most restaurants were able to delay tax and supplier payments, but as deadlines expire we will see more closings due to inability to pay
- Leases will need to be reviewed as a large part of the fixed cost of the business
- Businesses that depend on tourism will suffer more
- Fairs and events become less common, penalizing hotels and catering businesses
- Colder weather as the summer ends will reduce opportunities for outdoor dining. The new peaks in COVID cases in autumn/winter 20/21 will severely affect these businesses.

#### Hospitality is especially important in southern Europe

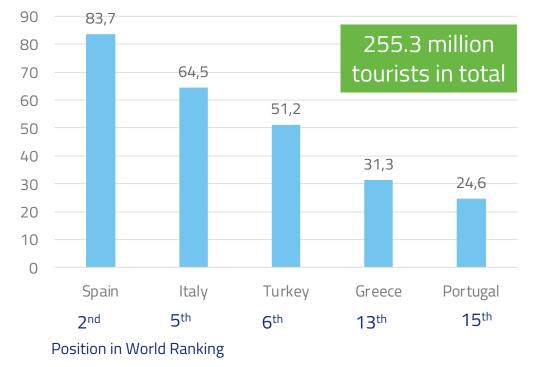


#### Contribution of hospitality to GDP



# Southern Europe's food service industry is reliant on international tourism

The five largest countries in southern Europe are among the 15 most visited countries in the world, meaning that the survival of HORECA businesses is dependant on the recovery of tourism



### Foreign tourists in 2019 (millions)

SOURCE: UNWTO August/September 2020



"If we lose small businesses, we will lose a lot of our food and beverage cultural richness"

Ömer Faruk Boyaci, owner of Sirkeci Mansion Hotel



## Delivery is an important opportunity, but the current business model needs to be changed

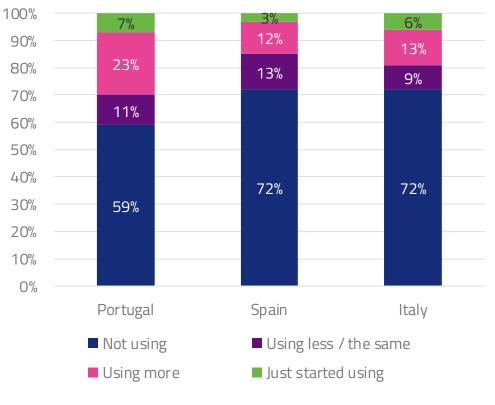


#### Delivery and takeaway

-ood

- Delivery platforms became the main, and sometimes only, sales channel for many restaurants...
- ...but their fees are extremely high in a low margin business making it unlikely to be a long-term solution for restaurants
- Platforms also control all consumer data, and don't share it with restaurants
- Some restaurants developed their own delivery services, but the sustainability is in question
- Takeaway is usually easier and more suitable, but an improvement in customer experience is needed
- That is why takeaway and delivery menus need to be created with at-home consumption in mind
- Dark kitchens are a better and rising business but not a suitable option for the whole market
- Euromonitor predicts the market cap for dark kitchens will grow to \$1 trillion by 2030

Restaurant delivery usage



SOURCE: McKinsey, June 2020

# The sector's current digitalisation level needs a bigger push

### Digitalisation

- Digitalisation and automation of most processes is going to be key to survive (most relationships with providers are still done over the phone)
- Digitalisation will mean cost reduction as it can help to forecast sales, allowing restaurants to match supply with demand more effectively
- The increase in digital payments is also an opportunity for more data analysis, even though it is complicated to implement for many businesses
- Loyalty programs and brand engagement actions will be key to maintain current customers once the pandemic is over
- The main barrier is that this a very traditional sector where the implementation of new technologies is slow





"Big data, loyalty and new business models. If you bring them together, you will be successful"

Quality Score

**981/3**1

Ömer Faruk Boyaci, owner of Sirkeci Mansion Hotel

### Restaurants develop new revenue streams

These are low margin businesses with several COVID-19 limitations, leaving them with little room to adapt. However, some restaurants have managed to develop new revenue streams. Here are some of them:





Madrid based K154 launched an online shop with ingredients and pre-prepared meals for an elevated athome experience



Maria and Rui from Kitchen Dates in Lisbon, started quarantine cooking classes. "A lot of people come to us searching for knowledge even more than the food itself," says Rui



Luxury resort II Pellicano, in Tuscany, with homonymous Michelin-awarded restaurant on the premises launched lifestyle and e-commerce website Issimo











# Shopping experience and behaviour shifted due to hygiene measures



# Grocery e-commerce takes off, but there is a long way to go before it becomes mainstream

- Online grocery sales more than doubled in many countries, but still represent less than 5% of the total in the south of Europe
  - This trend remains stable and has not gone back to pre-lockdown figures
- Most of the increase comes from new users and new age segments that were underrepresented, such as the over-65 segment of shoppers
- Retailers have had difficulties providing this service as their platforms were not ready for this level of demand
  - The channel is not yet profitable as most of the process is still very manual
  - More volume will be need before implementing automation in the process
- Omnichannel options increase, with click-and-collect as a relevant solution
- Overall consumer experience is worse than expected but shoppers understand that this is an exceptional situation
- Consumers return to previous behaviours, meaning less online and more physical shopping









**4.3%** as of April 2020

**4.3%** as of April 2020



1.8%

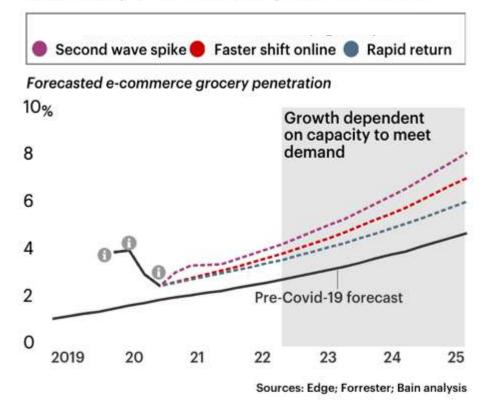
as of March 2020

7.4% as of March 2020

Source: Bain & Company, Kantar

# Grocery e-commerce will remain strong post-COVID but still experience growing pains

In Italy, the adoption of e-commerce has accelerated by two years



Food

"Online grocery continues to have a tremendous difficulty in the profitability and efficiency of the process itself"

Enrique Monzonis, retail expert

### Faster adoption in our five-year scenarios ...

## Stock-outs and the disruption of products in ecommerce impact the overall experience



Source: Euromonitor International

Note: Averages based on totals for all of Packaged Food Indicated by unlabelled centred dot

C Euromonitor International

VIA





## R&D and Innovation



## Is this an ideal time for innovation?

- The need for fast solutions and the lack of resources is an opportunity for innovation as the fear of failure is reduced
- Innovation is more relevant than ever for the food industry as it is critical to provide added value to consumers
- There will be less, but more relevant, innovation
- HORECA is the sector with the greatest need for innovation as restaurants are seeing the largest changes and severest impact
- Talent is more available now due to remote work
- In southern Europe, the high level of market share achieved by private labels will make it harder for innovation from brands to succeed

In Spain, 91% of FMCG producers are looking for new innovation areas during COVID-19



SOURCE: Lantern/IRI study



"This is the best time for innovation because there is a sense of urgence and a lack of resources. We are out of our comfort zone"

Olga Matias, Innovation director at Mendes Gonçalves



## Private capital did not lose its interest in food startups, but public investment is likely to change

### Private

- Investors are looking towards relatively stable medium-term investments as well as business models that have been accelerated during this time and will have post-COVID-19 development
  - Mostly business related to digitalisation
- The seed capital for new projects will likely be more difficult to find
- The environment is hard to navigate due to less liquidity, lack of personal interaction, and uncertainty

#### Public

- New public budgets will likely see a cut in R&D funding due to new needs
- There are concerns about how small businesses can access these funds, as they have fewer resources to delay projects and seek funding



# R&D and innovation areas will remain the same, but several will see an acceleration

### Health & Nutrition

- Health food trend will be boosted by higher consumer demand
- Demand for immunityboosting products will rise
- The trend towards natural ingredients will continue

#### Digitalisation & traceability

- More digitalisation and automation will be sought in order to reduce costs
- Traceability and blockchain gain relevance

### Sustainability

- Agrifood companies did not stop initiatives in this area even though the virus has taken it out of the spotlight
- The circular economy will gain relevance as it becomes the new model for sustainability

### Plant-Based Food

- Farm to Fork strategy from the EU's Green Deal will propel this area
- Start-ups in southern Europe are working on it, but they have fewer opportunities in these countries because of their strong culinary identity and ingrained Mediterranean food culture





## COVID-19 Impact by country





## The lack of tourism severely impacted Greece

- The drastic fall in tourism seriously impacted the Greek economy and the food sector right when it was beginning to recover from the previous crisis
- The transition to electronic payments was already made due to previous EU-imposed measures in the 2008 financial crisis, so no major transition occurred during the pandemic
- Online retail markedly increased its previously low penetration
  - Sklavenitis supermarkets launched their platform during the lockdown
- Farmers did not develop organised DTC channels, but instead used alternative ones like personal contacts and WhatsApp
- Work from home is not a strong trend in the country due to their local business culture





## Italy was the epicentre of the pandemic in Europe

- Being the epicentre of the pandemic in Europe, the country suffered from one of the longest lockdowns
- Strikes by migrant workers in the south, and Deliveroo and other delivery drivers countrywide due to safety problems and lack of rights created visibility for these groups
- Farmers attempted to diversify with direct selling, online platforms, consumer associations and direct contact with retail but the complexity of these strategies hinders their long-term sustainability
- There was an increase in social solidarity with several initiatives to help the most impacted people, such as "café sopeso" where customers can pre-pay a coffee for someone in need





## Portugal wasn't initially affected disproportionately, but the British travel ban hit them hard

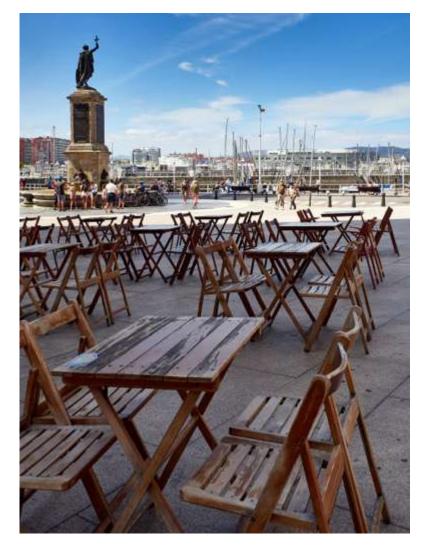
- An early locked down helped Portugal avoid an initial peak in cases
- During the worst weeks, the local government extended migrants visas in order to maintain their status in the social welfare system
- The travel ban from the British government severely impacted the tourism industry, which was countered somewhat by increased travel by locals and residents of neighbour countries
- Working from home was already a growing trend and was accelerated by this situation
- Unilever, with Danone and JMDB (an international brand distributor in Portugal), developed a platform to deliver their products through delivery apps Uber Eats and Glovo





# In Spain, the failure to control outbreaks afflicted food service and tourism

- Spain is one of the countries most impacted by the coronavirus, which has had a significant impact on food service and tourism, two areas making up a significant share of the national economy
- Many restaurants in Spain, up to 40% in some regions, did not reopen after the lockdown and 65,000 businesses are expected to close
- The DTC channel doubled during the lockdown and continues growing steadily with some major brands and small businesses opening their own platforms
- Electronic payments, via credit card or mobile NFC, have also increased notably in recent months compared with previous years





# Turkey has suffered from the decline in tourism and issues with foreign and domestic markets

- Negative economic outlook due to debt in foreign currency and lack of influx due to drop in tourism which will complicate attracting foreign investment. Economy not likely to recover until Q3 of 2022
- Food sovereignty is gaining importance at national government level
- Some of the barriers to remote work are being eased, but its normalisation is unlikely in the medium term
- The large percentage of small businesses in the food service sector puts them in real danger of disappearing from the fall in tourism and local consumption, and the difficulty of adapting to new formulas and finding new revenue streams





# In summary, there are positives and negatives in each of the analysed areas

-ood





56



## Future Agrifood Scenarios







## Introduction





The future cannot be predicted, as it does not yet exist Speculative futures is a social and business discipline that helps organisations prepare for the coming future.

We collect signals of the future in today's world, and picture how those signals might accelerate as trends, painting a realistic image of the future.

## What is the purpose of speculative future studies?



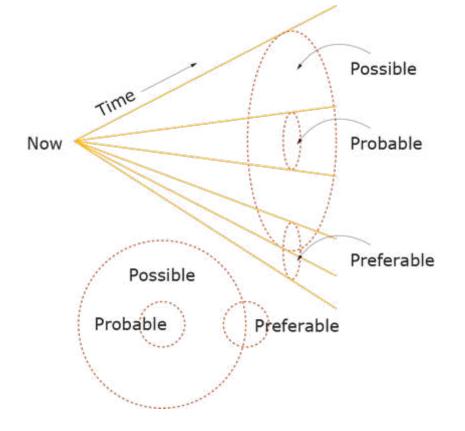
Eit Food

- Use as tools for reflection
- Fostering strategic thinking
- Laying the foundation for decision making
- Development of short, medium- and longterm strategies

# The objective is to have several potential scenarios with an estimation of probability for each one

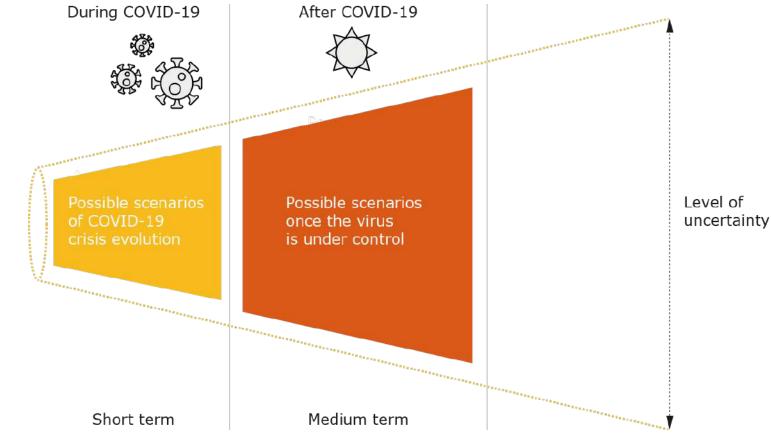
The future cannot be predicted, but with relevant signals, trends and ideas, we can estimate the probability for a scenario to become real. This scenarios can be:

- **Probable / projected** (centre of the cone): "business as usual". Gradual change, very similar to the current reality.
- **Preferable:** desirable, by a small group, a company, or on a major social scale.
- **Possible:** Includes all imaginable scenarios. A new discovery, knowledge, or unexpected event can rapidly make unlikely scenarios possible.





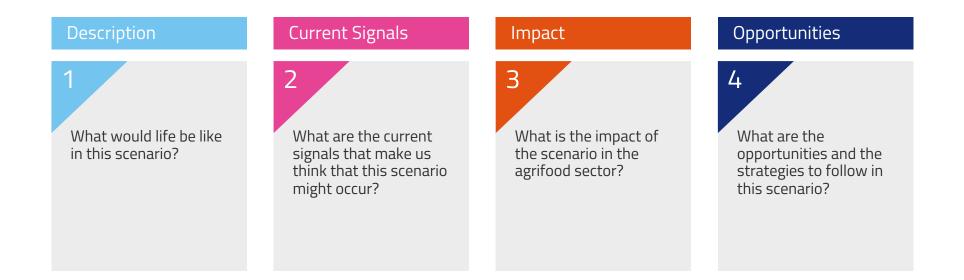
# We have developed two sets of scenarios: during and after the COVID-19 pandemic





### Each scenario will cover 4 elements









## Short Term Scenarios: During COVID-19



## In order to create these COVID-19 scenarios, we use a two-axis grid



This axis reflects the speed of economic recovery after lockdown, indicating the various control measures that each government has and will implement. There are several elements that are taken in account:

- COVID-19 control measures •
- Local government aid and policies •
- EU budget agreements and funds •
- Companies' reactions •
- Return to consumption ٠

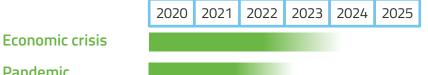
### **Progression of pandemic**

On this axis, we measure the control of the virus and rate of new infections—not necessarily a complete eradication, but instead mild differences in health systems and the attitudes and behaviours of citizens. The elements considered are:

- Number of infections •
- Date of the vaccine .
- Effectivity and availability of vaccine •
- Virus treatments ٠

#### Duration of these two external forces

The proposed scenarios are based on how much these two forces extend in time

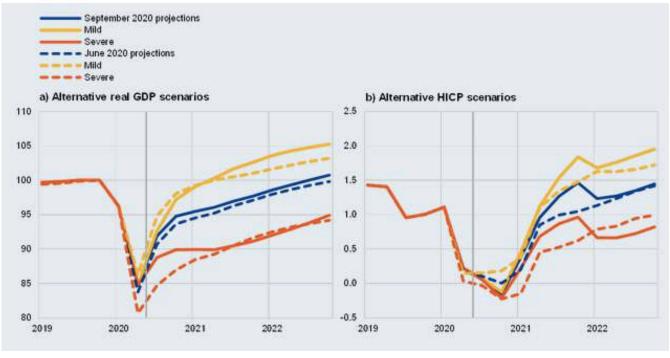




Pandemic

# Speed of economic recovery is uncertain and depends on progression of the virus

- The economic impact of COVID-19 is enormous and still difficult to predict
- Most experts agree that next summer should be a good thermostat for recovery
- The main consensus is that the agrifood sector isn't expected to reach pre-COVID levels before 2022



#### Alternative scenarios for real GDP and HICP inflation in the euro area



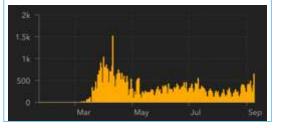
SOURCE: ECB September 2020 (index: Q4 2019 = 100 (chart on left); year-over-year rate (chart on right)



## Infection rate is still unpredictable

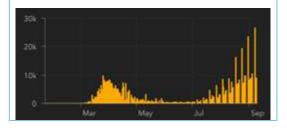
### Portugal

Portugal reports a much lower death rate due to COVID-19 than many European countries. However, at the beginning of September it reported its biggest daily increase in cases since its lockdown was lifted in May.



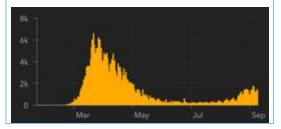
#### Spain

Spain is one of the hardest-hit countries in Europe and became the first country in Western Europe to pass 500,000 cases in September. Protests against the government's handling of the pandemic were widespread.



#### Italy

Italy was one of the first European countries to be hard hit by COVID-19. After seeing a light increase in August, testing on arrival for those returning from holiday was made mandatory and many restrictions were put back in place.



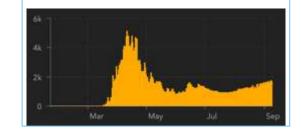
#### Greece

Despite Greece's initial success in managing the pandemic, countries like England imposed quarantine on those returning from holiday after some cases were traced back to Greece. Nonetheless, rates remained relatively low after.



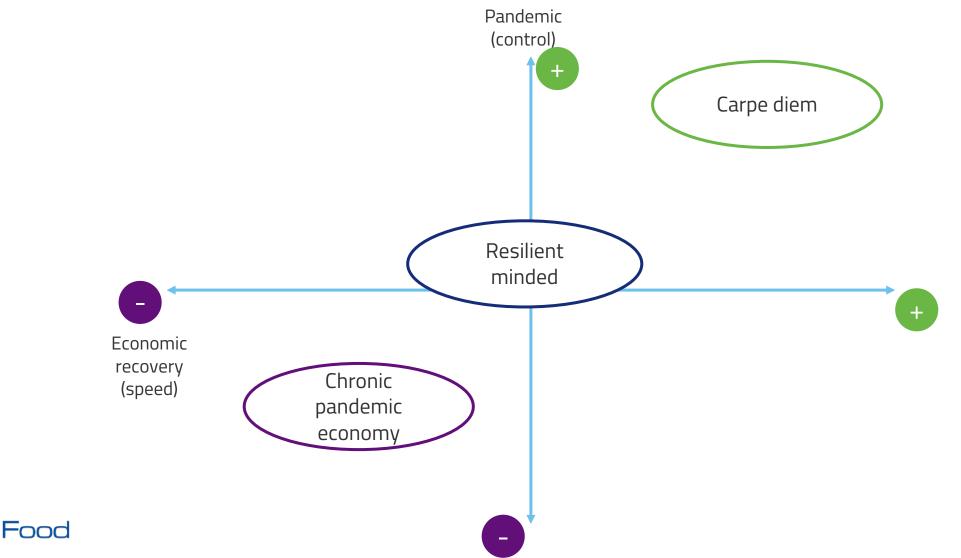
### Turkey

Following the first peak, Turkey saw daily cases fluctuating above 1,000. The country struggles economically, with significant inflation placing the lira at an all-time low.

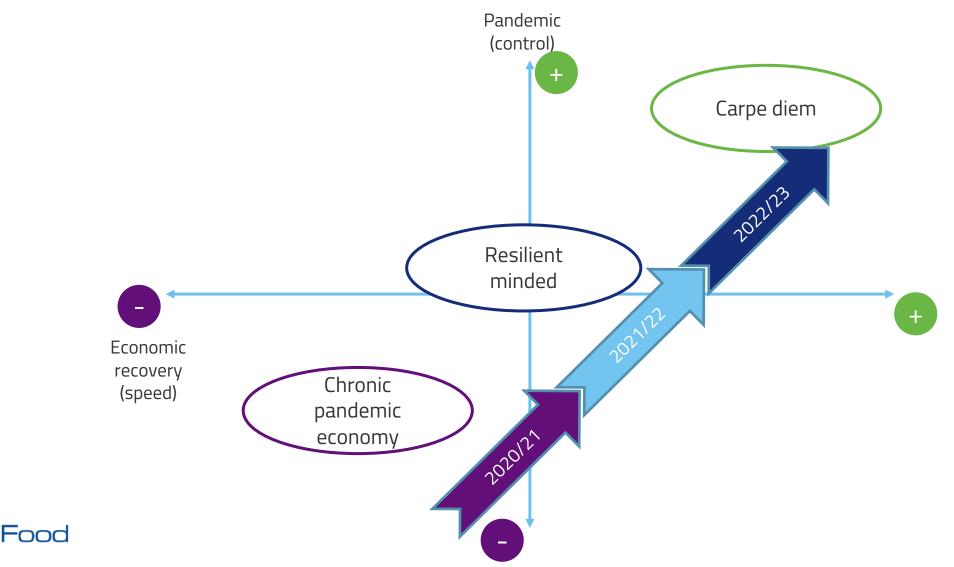




## During the pandemic, we see three possible shortterm scenarios



## These scenarios could happen consecutively and are not necessarily exclusive of each other





## Chronic Pandemic Economy Scenario

## Chronic pandemic economy scenario

#### Description

The virus takes a long time to be brought under control and it is not until the beginning of 2022 that the vaccine makes a noticeable impact. Hospitals remain in a permanent or semi-permanent crisis mode which has a negative impact on public health overall.

During this time, continuous outbreaks create a state of prolonged fear among the population. This collective mentality leads to low consumption and an economic crisis uncontrollable by institutional policy. The economic crisis worsens, and poverty and inequality rise.

During this period countries reinforce their borders to control the virus and transit between countries is severely limited.

European countries focus their efforts on their own situations. EU economic aid is delayed.

There is a long-lasting impact in consumers' minds due to the duration of the situation. Health and price become the main drivers of consumption as a survival attitude becomes mainstream.





#### Current Signals

- Many uncontrolled outbreaks still remain
- Cancellation of holiday trips due to the pandemic
- Some vaccines in trial phases experience complications
- The new wave of the virus worsened the economy and the situation of businesses focusing on out-of-home consumption



# Chronic pandemic economy scenario

### How to adapt to a restricting situation

#### Impact

#### **Primary sector**

- Surpluses rise due to lack of workforce for harvesting and fall in demand
- Less consumption of fresh produce due to fears of contamination and higher prices

#### Food production and supply chain

- Supply problems are common as well as regular closures due to employee infections
- Lower demand due to economic crisis
- SME closures, merge and acquisitions in large organisations
- Processed food increases its market share

#### Food service

- On-and-off lockdowns make it almost impossible for these businesses to survive, a third of restaurants close between 2020/21
- Takeaway and delivery are necessary

#### Opportunities

#### **Primary sector**

- DTC channels
- Alternative use of surpluses
- Cooperation to help gain muscle in difficult times

#### Food production and supply chain

- Optimisation & reorganisation of internal logistic flows
- Focus on core and smart choice type of products
- Investment in branding and "safe product" labels

#### Food service

- Takeaway and delivery only businesses, using dark kitchens to offer affordable delivery food
- Alternative uses of premises (coworking, storage, shop...)
- Patio seating expands as indoor dining is limited





# Chronic pandemic economy scenario

### How to adapt to a restricting situation

#### Impact

#### Retail

- Stockouts and price fluctuations become commonplace
- Restrictions and reduced opening hours, with simultaneous increases in price

#### Opportunities

#### Retail

- Improve in-store safety experience to solidify the relationship with shoppers
- Push omnichannel solutions like click-and-collect to improve the experience
- Proximity solutions as a key factor to get closer to customers

#### **R&D and innovation**

- Almost no resources for R&D and innovation
- Investment exclusively for start-ups presenting digital solutions

#### **R&D** and innovation

- Cost reduction, food security, and focus on health
- Digitalisation oriented start-ups will have a clear opportunity





### **Resilient Minded Scenario**

### Resilient minded scenario

#### Description

People become used to living with the virus and adapt their behaviours to it. Occasional outbreaks still occur but are kept under control. Consumers start to act as "normal" as the situation allows. Large events and related business are still limited.

Companies operate with a high level of uncertainty, and forecasting is difficult. That also impacts consumption levels as the duration of the pandemic is unclear.

As outbreaks continue, although they are quickly brought under control, remote work is the main option for those jobs that are suitable for it.

The COVID-19 vaccine has promising potential, but production and implementation are slower than predicted.

Doctors have discovered treatments to limit deaths and long-term health effects while the at-risk population maintains stricter safety measures



2020	2021	2022	2023	2024	2025

#### Current Signals

Economic crisis

Pandemic

- Mask wearing is mandatory and normalised by the population
- Public policies and funds are working to support the economy and maintain employment
- People returning to stores and restaurants with caution
- Sales in food retail are stabilising



### Resilient minded scenario

### How to maintain loyalty and trust during uncertain times

#### Impact

#### **Primary sector**

- Automation and local labour are incentivised in local areas due to lack of immigrant workers
- Consumers increase consumption of healthy and local products

#### Opportunities

#### Primary sector

- Steps towards automation
- Focus on healthy products
- Prioritisation of local markets over exports

#### Food production and supply chain

- Factories suffer occasional closures
- Home cooking increases as well as consumption of comforting traditional products

#### Food service

- People still avoid crowded places and being inside
- Delivery continues double digit growth

#### Food production and supply chain

- Distributed production
- Comfort and indulgent foods more suitable for increased home consumption

#### Food service

- Technologies to reduce contact and improve safe experience for food service consumers
- Reinforce loyalty programs to solidify relationships with consumers
- Moving the on-premise experience home
- New outdoor dining concepts

77



### Resilient minded scenario

### How to maintain loyalty and trust during uncertain times

#### Impact

#### Retail

- Online grocery shopping continues to grow significantly
- Increased demand of ready-to-eat food as visits to restaurants are reduced

#### Opportunities

#### Retail

- Potential volume makes automation of online operation more feasible
- Aggregators can help small business and producers become more digital
- Ready-to-eat counters and aisles

#### **R&D and innovation**

- Public resources will be less available
- Investors act early to bet on recovery
- More focus on digitalisation and health-related projects

#### **R&D** and innovation

- Collaboration with start-ups
- Intersection between health and technology in food





# Carpe Diem Scenario

# Carpe diem scenario

#### Description

The virus is almost completely eradicated in a short period of time, the vaccine has been a success, and the economy is back on track within a year. The overall mindset is positive and optimistic about how society has dealt with this unprecedented situation. City streets are full of people again, along with restaurants, bars, and shops.

The consumer rapidly forgets social distancing and looks to recover lost time. Revenge spending explodes.

There are still some losers in this scenario. There are greater differences between those that have suffered the economic consequences and those who haven't.

In terms of public health, vaccines have been developed rapidly and successfully, with positive results. Most of the population has been vaccinated and there is a plan for the remainder. The level of infected people drops sharply.





#### Current Signals

- China saw a fast rebound in sales
- EU agreement set to give funding to most fragile economies
- Multiple pharma companies see significant progress towards vaccine development
- Mortality rate and hospitalisations have diminished notably



## Carpe diem scenario

### How to leverage reawakened positive attitudes

#### Impact

#### **Primary sector**

• Increased demand for high-value products

#### Opportunities

#### **Primary sector**

More craft and premium production

#### Food production and supply chain

- Increased demand for innovation and experience
- Convenience regains momentum

#### Food production and supply chain

- Food consumption experience as key in new product development
- Ready-to-eat and kitchen helpers

#### Food service

- Restrictions end and consumers start recovering their previous out-of-home consumption habits with enthusiasm
- Not all businesses remain open
- The sector starts to rethink its business model

#### Food service

- Fulfilling experiences to help consumers recover the lost time
- More professionalisation of businesses
- Consolidation of new business models



## Carpe diem scenario

### How to leverage reawakened positive attitudes

#### Impact

#### Retail

- Online grocery shopping continues growing but a much lower rate
- Shopping habits stabilise

#### Opportunities

#### Retail

• New retail experiences

#### **R&D and innovation**

• More interest in new and exiting products

#### **R&D** and innovation

• More investment in innovation







### Medium-term Scenarios: Post-COVID-19



Heraclitus said, "You cannot step into the same river twice"

# Major changes will probably occur that will impact the agrifood sector

#### Digitalisation

- Digitalisation and mechanisation is a trend that accelerated during this pandemic and proved its relevance and need
- From processes to channels and the supply chain, the whole food system has opportunities to improve in digitalisation

#### Working from home

- The pros and cons of remote work became evident, but the general consensus is that it is here to stay and took a huge leap in a short period of time
- The level of impact on the food system is still unknown, but it will be relevant:
  - Less visits to the office means less OOH occasions in canteens and restaurants in office areas
  - More at home lunches means more home cooking and more delivery during lunch hours
  - Office meals as an employee benefit needs to be revisited

#### Sustainability

- The EU's Farm to Fork strategy and the Green New Deal will make a relevant impact on the overall sustainability trend and many business will accelerate their policies and projects
- Consumers will also be more aware of their impact on the planet and will act accordingly

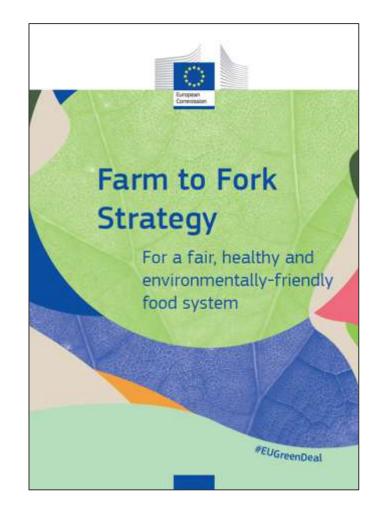
#### Healthier living

• The pandemic has made the healthy food trend more relevant than it was before, and that will definitively impact on what and how we eat



# The EU Farm to Fork strategy is necessary and will drive sustainability in the medium term

- All of the experts agreed that sustainability is the ultimate objective, and all efforts must be directed towards that goal
- The discrepancies arise with the speed of the change, as some of the proposed deadlines seem difficult to achieve, especially considering the current situation
- These initiatives imply significant investments, and currently consumers are not willing to pay for those measures through increased prices
- During the crisis, companies did not stop ongoing initiatives, but will not accelerate them either
- However, some actions can lead to economic improvements (e.g. leaner transport costs as a result of better processes)
- The impact of these policies will be more relevant in the post-COVID-19 era and in the industry's strategies to lessen the negative impact of the crisis





# In order to create these post-COVID-19 scenarios, we use a two-axis grid

#### Change in the industry

How much will the industry change after the pandemic and how profound will those changes be? Businesses are developing many initiatives, but are they going to continue after COVID-19? Several factors are taken into account:

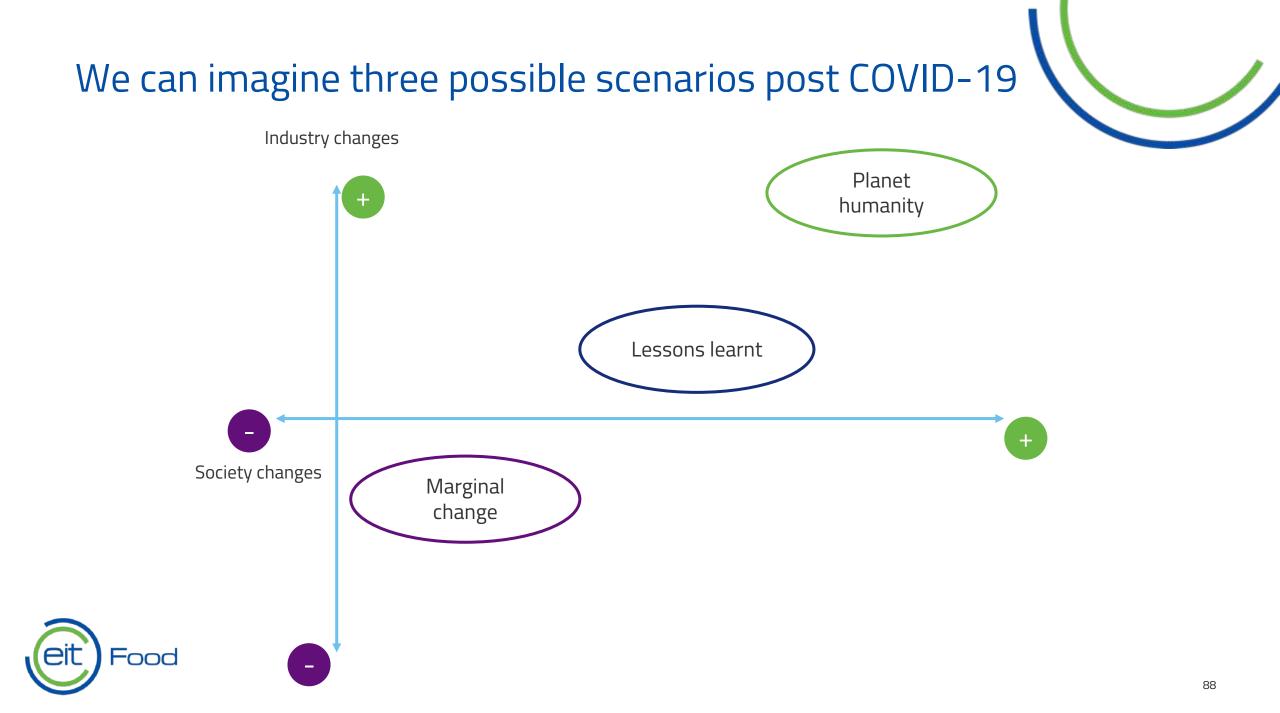
- DTC and e-commerce initiatives
- Digitalisation and mechanisation
- Sustainability and circular economy measures
- Changes in the supply chain
- New business models
- Etc.

#### Change in society

We have all been impacted by the pandemic, but how much will that to change our consumption habits, needs, and aspirations? There are certain elements to focus on:

- Relevance of healthy choices
- Conscious consumerism
- Social or sustainable impact as a purchase driver
- Remote working
- Movements of people to rural areas
- Etc.







Marginal change

# Marginal change scenario

#### Description

The world is back to school, and a new semester begins. The pandemic has been a long, unpleasant summer holiday—a plight that is now over. It is now September and it is time to return to the status quo from a few months ago.

When we were in school, the beginning of the semester was always the same. We tried to remember what we had learnt in the previous year, but new ideas came along.

Most of what we were doing before the appearance of the virus has returned to our lives. We have not changed much in our behaviour, and neither has the agrifood industry.

However, there are some things that we all have learnt during these strange times, and they have stuck in our minds and in those of the companies. Still, we are not truly conscious of them.

We care more about our health. We know more about hygiene, but we continue going to crowded places. Remote working is part of our working routines and we shop even more online; we now prioritise convenience far more than ever before.



#### Current Signals

- Previous crises have brought change to some businesses more than others
- Social changes are not as fast as we would like to think, humans are creatures of habit
- This is an exogenous crisis so some think there is no need for structural changes at all
- Some things did accelerate during the lockdown, but slowed down after



### Marginal change scenario How to only address structural problems

#### Impact

#### **Primary sector**

• Governments are giving aid to modernise and increase mechanisation in the primary sector due to increased concern over dependence on immigrant workforce

#### Food production and supply chain

- Online channels continue developing
- Supply chains focus is still on strength and reliability
- Zombie SMEs

#### Food service

- Many businesses did not survive and are closed or sold
- Search for reduction of operating costs
- Delivery continues growing and concentrating

#### Opportunities

#### **Primary sector**

Modernisation of rural businesses through more digitalisation and mechanisation

#### Food production and supply chain

- More online platforms from brands
- Companies will continue having more providers than before COVID-19
- Mergers and acquisitions

#### Food service

- Mergers and acquisitions, especially in larger food service chain operators
- Adaptation of business models to delivery





### Marginal change scenario How to only address structural problems

#### Impact

#### Retail

- On-premise shopping behaviour returns to the same as pre-COVID-19
- Online grocery continues growing at a slower pace

#### Opportunities

#### Retail

• Continued improvements to e-commerce capabilities

#### R&D and innovation

- Start-up investment looks for unicorns again
- R&D recovers its funding and normal activity

#### **R&D** and innovation

- Start-up funding
- R&D focus on health and food safety





## HUB4AGRI is a multi-sector cooperation network that seeks to digitalise Portuguese agriculture

The HUB4AGRI initiative aims to create a multi-sector cooperation network that promotes the connection between technology providers and the needs of the agricultural sector. Innovation is promoted and supported through digital decision support tools and R&D activities, serving as a onestop shop for providers through a European cooperation network.



A ONE-STOP-SHOP SOLUTION TO INCREASE SUSTAINABILITY IN AGRICULTURE





### Lessons Learnt

### Lessons learnt scenario

#### Description

The pandemic has been a wake-up call for everyone. We have learnt an important lesson about the relevance of our health and how we are all globally connected.

There is higher concern about our individual impact on society and the planet. We are more concerned about our peers and that leads to more conscious consumption. Local consumption becomes a stronger driver.

Companies are made up of individuals and, that said, they are also permeable to these concerns. Step by step, they are taking actions to become better citizens and to make peoples' lives better.

Food organisations are more concerned about what and where they are buying, and what the impact of that is.

But that is not all we have learnt. We also know that direct to consumer channels are now something to care about.

We have learnt also that cooking at home is not as complicated as it looked, and we can do it in a healthier way while looking for convenience at the same time.



#### Current Signals

- Society has responded in a more humane way to this health crisis
- Sustainability is even more relevant now
- Health food trend is already established
- Increased interest in local products
- Fast growing grocery and restaurant delivery



### Lessons learnt scenario

### How to rethink our impact on health and on the planet

#### Impact

#### **Primary sector**

- Government aid to modernise the sector
- Focus on local demand as a way to reduce carbon footprint
- Health food trend will advance products perceived as healthy

#### Opportunities

#### Primary sector

- New policies to contribute to a structural shift in the labour market
- AgTech start-ups
- New crops perceived as healthier, like ancient grains and superfoods

#### Food production and supply chain

• Consumers increase their online grocery purchases directly from the brands they trust

#### Food production and supply chain

• Brand-owned DTC channels

#### Food service

• Food delivery continues growing but consumers are more demanding on working conditions and sustainability

#### Food service

- Large food chains redesign their delivery service and develop their own to control the experience
- Healthier food delivery options



### Lessons learnt scenario

### How to rethink our impact on health and on the planet

#### Impact

#### Retail

• Online grocery shopping reaches 10-20% share

#### Opportunities

#### Retail

- Implementation of more automation during the process (mainly order preparation) as volume increases
- Dark supermarkets to improve the last mile

#### **R&D and innovation**

- Boosting innovation to diversify business
- Funding for start-ups moves from looking for "unicorns" to "camels", more focused on steadfast product differentiation than on increasing their valuation

#### **R&D** and innovation

- Increased innovation activity in new business areas
- Start-ups oriented towards relevant products, not hype



### Cortilla: a sustainable Italian delivery service

Based in northern Italy, Cortilia allows customers to order 2,000 items from local farmers, producers, and artisans. The service has a dual impact on the Italian population: it brings seasonal Italian food to the online generation and brings modern grocery delivery to offline generations who value fresh, regional products.







# Planet Humanity Scenario

# Planet humanity scenario

#### Description

All that time fearing the virus, taking care of those around us and being aware of how vulnerable we are, has changed us. We are now more aware of our ability to impact the community and the environment around us.

Society has evolved to become more humane and conscious in the way we consume and interact with our planet. A parallel economy has been developed and is founded on sustainability and a more conscious way of living.

Public measures drive more collaboration, cooperation, and integration. At the same time, they discourage certain attitudes with taxes on carbon emissions, plastics, etc.

The green economy is growing and has now become the main factor driving the recovery, while the circular economy creates new business models and jobs that did not exist before.

Sustainability becomes one of the main drivers of consumption, while brands with clear sense of purpose increase their market share.



#### Current Signals

- Many companies already took the UN's Sustainable Development Goals as part of their corporate strategy
- We realised that we can live with significantly less consumerism
- EU's Green Deal and Farm to Fork strategy
- Increasing number of B Corp organisations



# Planet humanity scenario

### How to create a lasting impact on our planet

#### Impact

#### **Primary sector**

- Organic production increases
- Fresh product demand increases as consumers prefer "real food"

#### Food production and supply chain

- As the circular economy becomes mandatory, many factories change the way they produce, and the supply chain starts to include reversal logistics to recover the packaging and put it back in the system
- Sustainable origins gain relevance as a driver when choosing a
   provider

#### **Food service**

- New sustainability-based business models
- Increase demand for a more responsible delivery service

### Opportunities

#### **Primary sector**

- Organic vegetables and meat
- Urban farms as vertical farms, hydroponic, etc

#### Food production and supply chain

- Products related to the circular economy
- Products based on sustainable ingredients
- Real development of eco-friendly supply chain tools and utilities

#### Food service

- Organic restaurants and zero-impact restaurants (locally sourced and zero waste)
- More inclusive and responsible delivery service





# Planet humanity scenario

### How to create a lasting impact on our planet

#### Impact

#### Retail

- Local shops and specialists regain their market share
- Food waste concern is more relevant

#### Opportunities

#### Retail

- Local origin and organic as main offering
- Bulk corners in shops and bulk-based business models
- Dynamic prices dependent on expiration dates
- Leftovers usage campaigns

#### **R&D and innovation**

- Sustainability is now an important criterion for investment in a start-up
- R&D gains importance in organisations

#### **R&D** and innovation

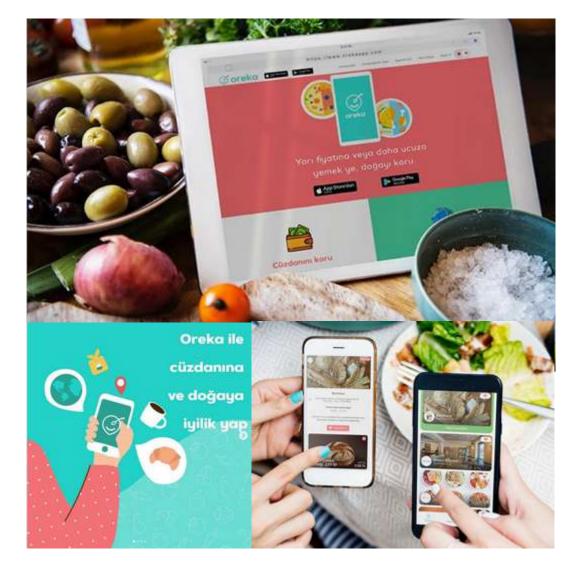
• More focus on circular economy solutions and product improvements that then lead to more sustainable solutions





### Turkish Oreka app helps reduce food waste

Turkish start-up Oreka, launched in September 2020, is a company that brings together food vendors and customers by offering large discounts on surplus food, preventing food loss and aiming to turn a profit at the same time. Turkey's food loss and waste adds up to 214 billion lira (€23 billion) per year. Oreka bridges the gap as an intermediary between premium food producers and sellers.







# Summary



### Key takeaways

How to prepare your business for any of these scenarios

What should I keep doing?	What should I get rid of?	What new things should I do?
<ul> <li>Focus on the core business</li> <li>Reinforce bonds with current customers</li> <li>Create safe and positive experiences</li> <li>Reinforce your value proposition</li> <li>Offer healthy and convenient products and experiences</li> </ul>	<ul> <li>Everything that is not key to the business</li> <li>Anything that creates an unsafe feeling for stakeholders</li> <li>Unhealthy and unsustainable products</li> <li>Office-only work environments</li> </ul>	<ul> <li>Be agile and act fast</li> <li>Invest in digital capabilities and DTC solutions</li> <li>Invest more in R&amp;D for health and food security</li> <li>Create new consumer experiences</li> <li>Think about how your business impacts the environment (people and planet)</li> <li>Integrate purpose at the core of strategy and execution</li> </ul>



# Annex

### Consulted public resources

- AECOC, "Acciones del retail internacional ante el Covid-19" (April 2020)
- AgFunder, "Mid-Year Investment Review" (July 2020)
- AZTI, "Cooperación entre industria alimentaria y turismo gastronómico: Reflexiones en tiempos de COVID-19" (May 2020)
- Basque Culinary Center, "Gastronomy 360°: Four post COVID-19 scenarios" (2020)
- BBDO, "The 5 Emotional Drivers to Purchase During the New Normal" (2020)
- BCG, "Tomorrow's Innovation Leaders Are Made Today" (April 2020)
- Boor Projects, "Our Shared Spaces What Happens Next?" (April 2020)
- Board of innovation, "The new Low Touch Economy" (2020)
- Civil Eats, "Restaurants Are at the Mercy of Delivery Apps, but Can they Survive the Pandemic Without Them?" (June 2020)
- Deloitte, "Camino hacia la recuperación: Perspectivas sobre el comportamiento del consumidor" (April 2020)
- El País, "El futuro ya está aquí: entre el miedo y la esperanza" (May 2020)
- Euractiv, "Coronavirus outbreak exposing vulnerabilities in the EU meat sector" (June 2020)
- Eurostat database
- European Commission, Farm to Fork strategy (2020)
- Euromonitor International
- Exceltur, "Medidas aplicadas por los distintos países en apoyo de las empresas turísticas" (June 2020)
- Expansión, "¿Acabará el Covid-19 con las cadenas de suministro globales?" (June 2020)
- EY & Bain, "Impacto de COVID-19 en hostelería en España" (April 2020)
- EAE Business School, "Las cadenas de suministro en la próxima pandemia" (July 2020)
- Findasense, "Escenarios y Horizontes de futuro post-cuarentena en el consumo y la producción" (April 2020)

- Forward Fooding, "2020 Food Tech Trends in Europe" (June 2020)
- Forbes, "Will This Crisis Change The World Of Grocery Shopping Forever?" (June 2020)
- GDR, "E-commerce in lockdown: An overview of consumer spending and innovation during the Covid-19 pandemic" (2020)
- GlobalData, "COVID-19 Executive Briefing" (August 2020)
- Globetrender, "Travel in the Age of COVID-19" (2020)
- Institut Cerdà, "Observatorio de innovación en gran consumo en España" (February 2020)
- IRI

٠

٠

- Just Food, "How could Covid-19 change how we think about food?" (May 2020)
  - Kantar
- KPMG
- McKinsey & Company
- Metropolis, "Rethinking and Planning for the New Restaurant Experience" (June 2020)
- New York Times, "Europe Tried to Limit Mass Layoffs, but the Cuts Are Coming Anyway" (August 2020)
- Nielsen, "El role del e-commerce en Covid-19... Y después?" (April 2020)
- OMD, "Business as unusual" (April 2020)
- Revista Hostelería, "¿Cuáles son los retos a los que se enfrenta el canal Horeca ante el COVID-19" (May 2020)
- Spain Entrepreneurship Observatory, "Situation of entrepreneurship in Spain due to the COVID-19 crisis" (May 2020)
- Universidad de Navarra, "El futuro del retail en la pandemia" (2020)
- VIA, "The State of Packaged Food E-Commerce Availability during Coronavirus" (August 2020)
- The Wall Street Journal, "Two Months that Tore Apart the Food Chain" (April 2020)
- World Economic Forum, "Covid-19 Risks Outlook" (2020)
- Wunderman Thompson, "The Future 100 2.0.20" (2020)



## Images attributions

- Cover: Nick Fewings
- Page 19: Tony Pham
- Page 27: Clint Adair
- Page 32: FUTC
- Page 34: Markus Spiske
- Page 35: Stephen Dawson
- Page 45: Rod Long
- Page 49: Jaime Arrieta
- Page 50: Marco Testi
- Page 51: Kobu Agency
- Page 52: Juan Gómez
- Page 53: Hadi Yazdi Aznaveh
- Page 57: Benjamin Davies
- Page 59: Guilherme Stecanella
- Page 70: Kai Dhams
- Page 74: Arturo Rey
- Page 78: Andre Hunter
- Page 82: Jeremy Bishop
- Page 88: Subham Sharan
- Page 93: Louis Hansel
- Page 98: Taylor Simpson





### Contact



David Lacasa, Partner at Lantern <u>david.lacasa@lantern.es</u> +34 639170517 Madrid, Spain





eit.europa.eu

### With the Support of Lantern<sup>®</sup>



EIT Food is supported by the EIT a body of the European Union