### Blockchain spreads like wildfire: digitisation strategies in the olive oil sector in Europe

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## Objectives

#### **OBJECTIVE 1**

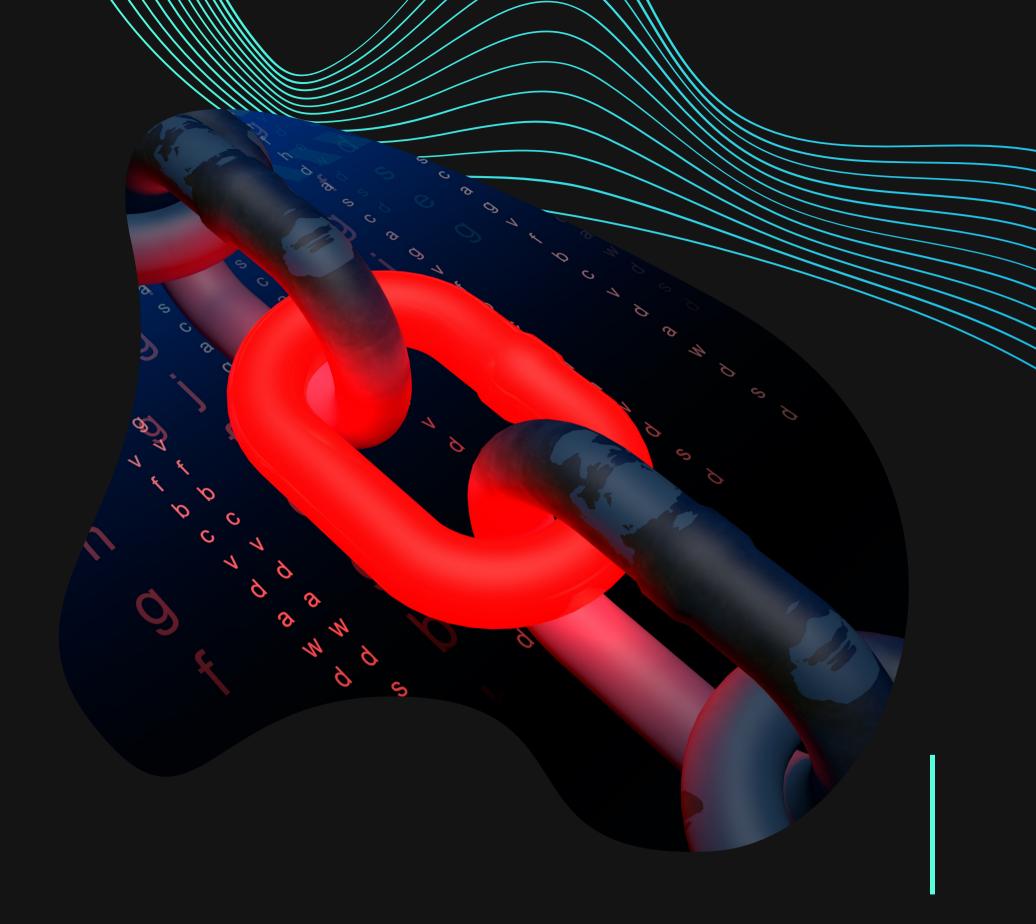
Blockchain and food security: how new technologies can make the provenance of food transparent

#### **OBJECTIVE 2**

The 17 Sustainable Development Goals: how blockchain can have an impact on economic and social growth

#### **OBJECTIVE 3**

Next Generation EU: a challenge to increase the level of digitisation of olive farms in Mediterranean Europe



## What is blockchain:

A shared digital register managed by a network of computer systems

Computer systems keep track of all operations performed and store them in blocks



#### Step 1

Users request a transaction

#### Step 2

Each transaction is associated with a unique hash value

#### Step 3

The transaction is sent to all nodes in the network

#### Step 4

If it respects the protocol, the transaction is approved by the nodes

## Come funziona

#### Step 5

The transaction is recorded in a block

#### Step 6

The block is irreversibly added to the blockchain **O4** 



# Blockchain in agrifood





#### **TRACEABILITY**

Blockchain technology would help make the supply chain efficient

#### **SECURITY**

Parameters are monitored to verify compliance with minimum safety standards

#### **QUALITY CONTROL**

Blockchain makes it possible to certify the origin of the product

## Challenges to be faced

#### **ACCESSIBILITY**

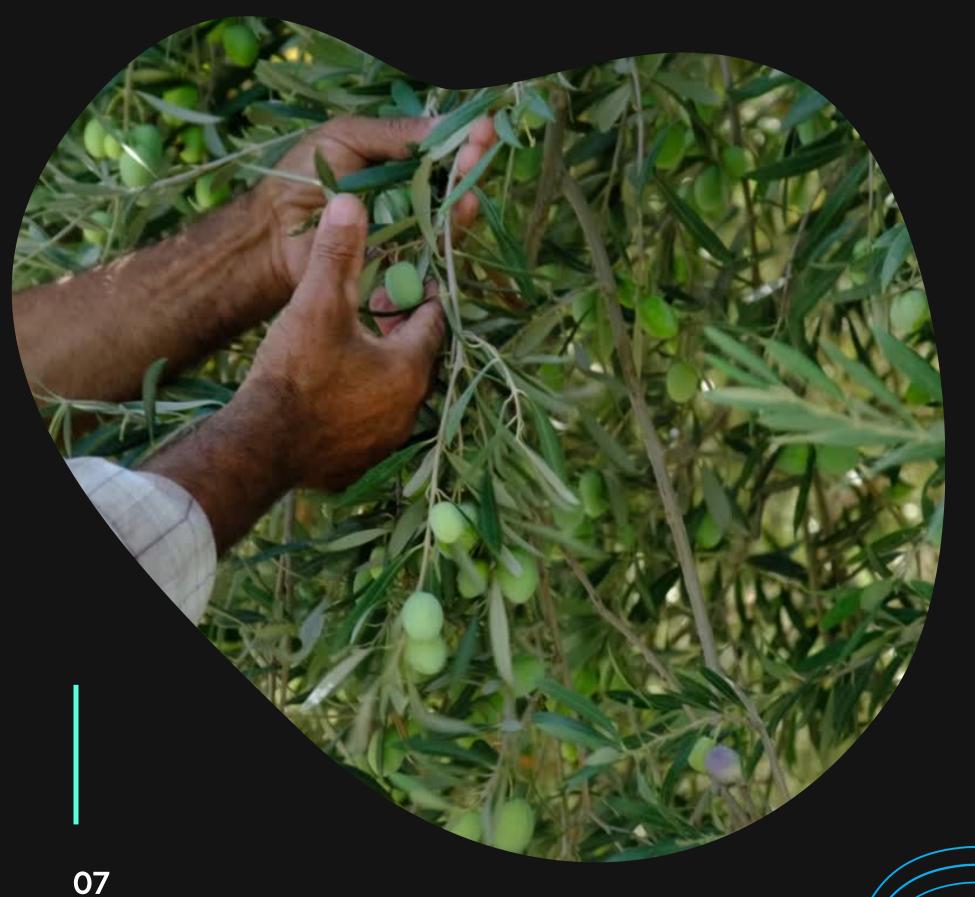
A blockchain system may fail to communicate with another distinct system

#### **RELIABILITY**

Information added to the system could be rigged upstream

### **EXCLUSION OF SMALL SUPPLIERS**

Small suppliers do not have sufficient financial resources



## The olive oil sector

The most important olive oil market worldwide is the European one

The main purchasing markets are the United States, Brazil, Japan, Australia, Russia and China. EU production accounts for 66% of oil exported worldwide

# 50% 6 out of 11

Forbes pointed out that 50% of the EVO oil on supermarket shelves could be the result of adulteration

The National Consumer League found that six out of eleven bottles did not meet the standards to be labelled as EVO oil



## Terra Delyssa

Information is provided on the mill and technical details such as the level of acidity

The app indicates whether the olives were cold-pressed and what kind of fertilisers were used

## The 17 Sustainable Development Goals





































# The contribution of blockchain in achieving the SDGs

Blockchain can help combat: the phenomena of counterfeiting and caporalato; support regional clusters; encourage the supply chain to adopt sustainable cultivation practices; reduce the industrialisation gap between Northern and Southern Europe



# NEXT GENERATION EU AND THE RELAUNCH OF SME

The programme reached provides for the allocation of EUR 750 billion to boost the economy after the pandemic crisis

The main purchasing markets are the United States, Brazil, Japan, Australia, Russia and China. EU production accounts for 66% of oil exported worldwide



# Thank you for your attention!

