SMART-FOODPRINT PROJECT: Advancing Traceability and Sustainability in Spanish **Food Supply Chains**

Eva Martínez-Ibáñez[1], Jara Laso[1], Ana Fernández-Ríos[1], María Margallo[1], Rubén Aldaco[1]

[1]Department of Chemical and Biomolecular Engineering, University of Cantabria. Av. De los Castros s/n, 39005 Santander, Spain

✉ eva.martinez@unican.es

21% - 37%
of total **greenhouse gases** associated with food systems.

30 billion €
associated with global **food fraud** per year.

22,5 %
of the products contain **incorrect labeling**.

10 billion
projected **world population** by 2050.

*Need for an easy and quality, Traceability system*

OBJECTIVE & METHODOLOGY

Provide to the Spanish food sector **advanced tools for traceability, authenticity, and sustainability monitoring** to aid environmental and socio-economic issues and boosting consumers' trust in sustainability-oriented certification schemes.

The project is coordinated by the **UC DePro-ACV** research group as leader and the **ESCI-UPF** group.

DATA REPOSITORY AND BLOCKCHAIN INFRAESTRUCTURE

Immutability of data collection along the food supply chain.

Species → DNA → Barcode
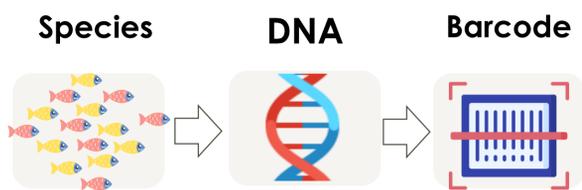
ICT INFRASTRUCTURE
Real-time data transfer

Fish authentication
Origin, production methods and freshens

KEY PILLARS

ENVIRONMENTAL PERFORMANCE

Environmental consequences of food fraud.

Life cycle assessment (LCA) model

Creation of a custom **database**

Calculation of the **impact** of food fraud

SMART SUSTAINABLE LABELLING SYSTEM

Ensure **food safety** and quality traceability.

Environmental performance of fish products and Consequences of food fraud

CONCLUSIONS

Enhancing **traceability** and **transparency** for a sustainable and accountable agri-food sector

Take-home Message

Improve traceability in the food supply chain for a more transparent and sustainable future.

MORE INFORMATION linkedin.com/company/smartfoodprint