



Strength2Food project evidence on PDO and PGI sustainability

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*Strengthening Geographical Indications Online
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 **#STRENGTH2FOOD**

How could the sustainability aspects of GIs be reinforced? (1)

Sustainability over time is an increasingly important issue that characterises the quality of food products (and especially GI products) as an “**extrinsic attribute**” and “**trust good**”.

Considering GI products, it is necessary to:

1) be aware of the characteristics of GI products:

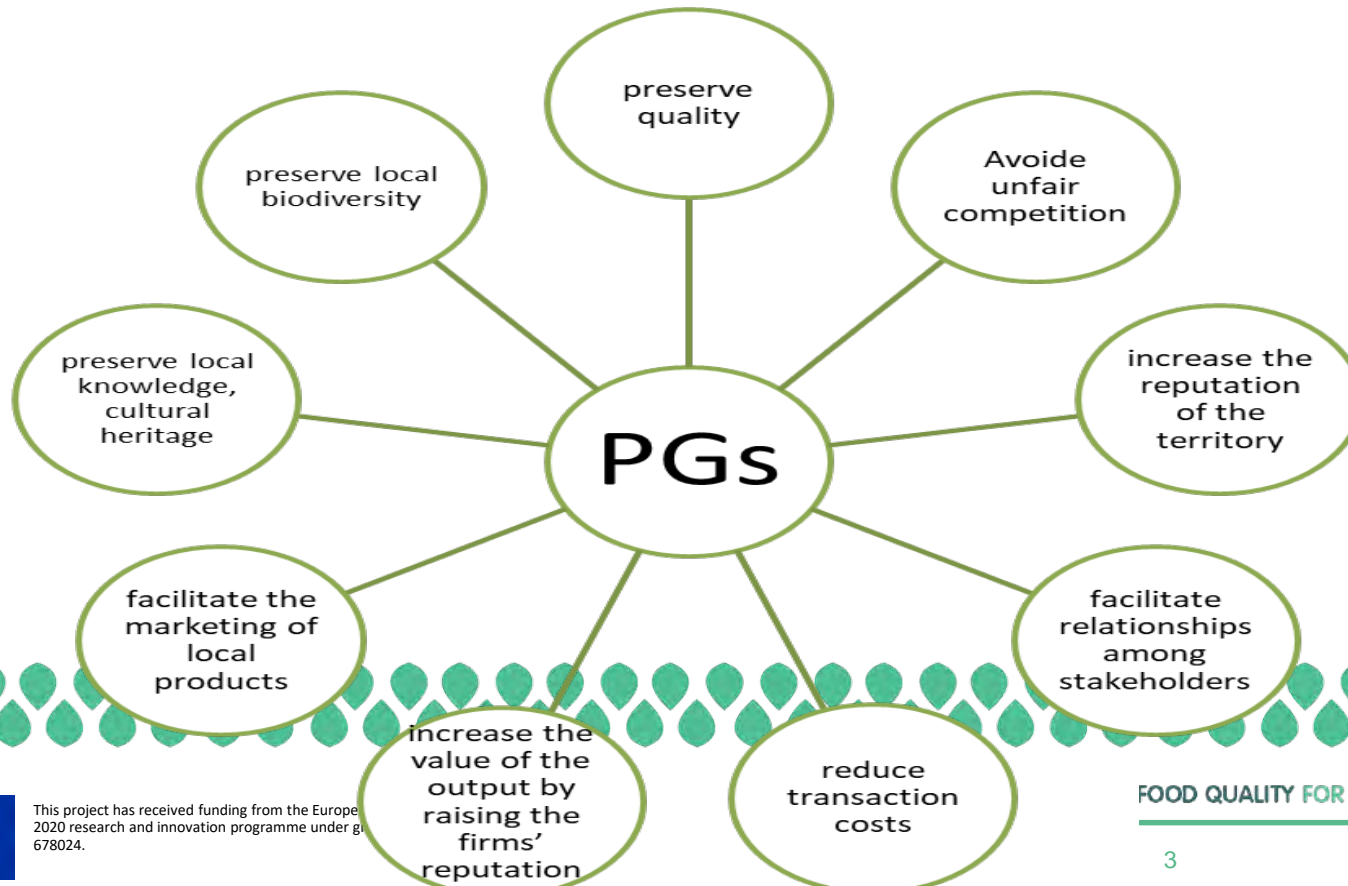
a) they are embedded products within their territory from which they bear their name and are the result of technical and social "compromises" that evolve over time through collective governance systems



How could the sustainability aspects of GIs be reinforced? (2)

1) be aware of the characteristics of GI products:

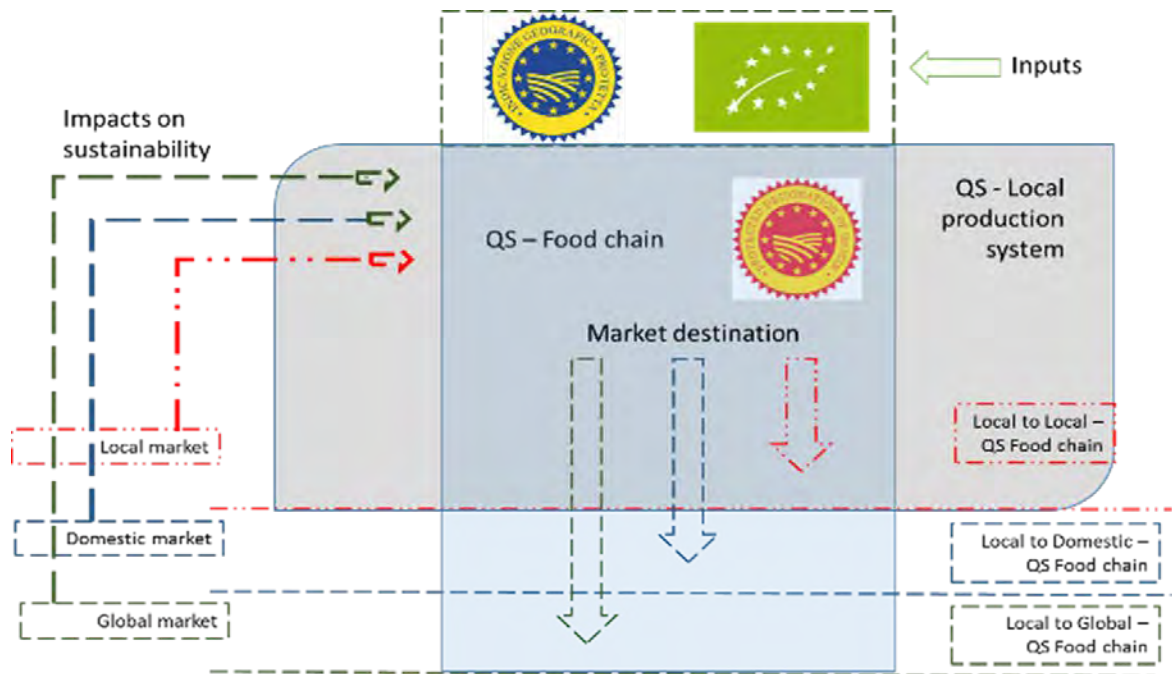
b) Using traditional production techniques, a public code of practice, they generate private and public goods.



How could the sustainability aspects of GIs be reinforced?

(3)

2) Adopt a concept of sustainability and specific analysis method for GI products (S2F, D3.1, 2016)



SAFA
SUSTAINABILITY ASSESSMENT OF FOOD AND AGRICULTURE SYSTEMS
INDICATORS



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How could the sustainability aspects of GIs be reinforced? (3)

- 3) Identify and share the determinants that impact on sustainability
- 4) Facilitate the compensation of externalities generated by GI products

SAFA / S2F Indicators	
Price Net margin Exported share	Food miles (distance) Food miles (carbon)
Carbon footprint (product) Carbon footprint (area)	Green water footprint Blue water footprint Grey water footprint
Labour/product Profit/labour	Bargaining power equality
Educational attainment Wage level	Local multiplier effect
Generational change Gender equality	



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Which tools and incentives will enable GI producers to best meet the environmental, climate and animal welfare challenges while ensuring their long-term benefits? (1)

Enabling tools for GI producers:

- Common set of indicators;
- Operational methodologies such as spreadsheets associated with indicators;
- Guide which support the assessment of indicator in different LAFS and products
- Information on existing good practice.

<https://www.strength2food.eu/resources/>



LM3 Tool (S2F variant)

The LM3 tool measures three generations of spending within a user-defined 'local' area. This then enables the calculation of the economic impact of a project. This variant uses the IMLtd database to generate the 3rd generation of spend for quicker use. LM3 is a fully working tool for anyone who wants to measure local economic impact.



Food Sustainability Indicators

The exhaustive lists of the economic, environmental and social indicators estimated for 54 food products in the H2020 Strength2food project will be made available for download in 2020.

In the meantime, the detailed method for data collection and indicator estimation and the spreadsheet tool to collect data are available here: [Methodological Handbook](#).



Which tools and incentives will enable GI producers to best meet the environmental, climate and animal welfare challenges while ensuring their long-term benefits? (2)

Incentives aimed to support Groups, especially if small, for:

- To understand and manage **the determinants** included in the **code of practice** that generate public goods and influence sustainability;
- To support **research** on public good generation for their specific GIs;
- To assess of the **evolution** of the determinants over time and adopting required forms of **governance** aimed to react;
- To **communicate** public goods existence to consumers and citizens;
- To improve the effectiveness of **SFSC and PSFP** via GIs and related benefits;
- To **subsidise certification** cost associated to public goods.



How could clear information on sustainability aspects of GIs be best conveyed to consumers?

- Use a **collective strategy** shared through Groups and GI Inter-branch Organizations;
- **Communicate the feature** of GIs' Code of practice and make explicit the link with Public Goods;
- **Communicate** the state of the art and the evolution of public goods using indicators, dashboards, and **social accounting report**;
- **Attract consumers** to production sites;
- Support communication campaign for **small Groups** (even by co-marketing strategy);
- Use a **third-party certification** that guarantees the truthfulness of public goods and externalities related to the product, for the benefit of the territory, producers, citizens and consumers.



How could the sustainability performance of GI production be verified?

HORIZON 2020



Strengthening European Food Chain Sustainability by Quality and Procurement Policy

Deliverable 3.1:

WORKING PAPER ON THE CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW FOR UNDERSTANDING THE SOCIAL, ENVIRONMENTAL AND ECONOMIC IMPACT OF FQS, SFSC AND VARYING PSFP POLICIES ON AGRIFOOD CHAIN PARTICIPANTS AND RURAL TERRITORIES

November 2016

Contract number	678024
Project acronym	Strength2Food
Dissemination level	Public
Nature	R (Report)
Responsible Partner(s)	Università degli Studi di Parma (UNIPR)
Author(s)	Arfini, F., Antonioli, F., Bellassen, V., Brennan, M., Fumel, M., Gorton, M., Hartmann, M., Hawes, D. R., Mancini, M. G., Roos, G., Schüssler, J., Tocco, E., Torjusen, H., Tregear, A., Veneziani, M., Virginie, A., Vittersø, G., Yeh, C.
Keywords	Conceptual Framework, Food Quality, Sustainability, Localised Agri-Food System

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HORIZON 2020



Strengthening European Food Chain Sustainability by Quality and Procurement Policy

Deliverable 3.2:

REPORT DETAILING THE METHODS AND INDICATORS FOR MEASURING THE SOCIAL, ENVIRONMENTAL AND ECONOMIC IMPACTS OF FQS, SFSC AND VARYING PSFP POLICIES ON AGRIFOOD CHAIN PARTICIPANTS AND RURAL TERRITORIES

October 2016

Contract number	678024
Project acronym	Strength2Food
Dissemination level	Public
Nature	R (Report)
Responsible Partner(s)	INRA
Author(s)	V. Bellassen, G. Giraud, M. Hilal, F. Arfini, A. Barczak, A. Boćini, M. Brennan, M. Druet, M. Duboys de Labarre, M. Gorton, M. Hartmann, E. Majewski, S. Monier-Dilhan, P. Muller, T. Poméon, B. Tocco, A. Tregear, M. Veneziani, M-H. Vergote, G. Vittersø, P. Wavresky, A. Wilkinson.
Keywords	Methodology, indicators, food quality schemes, short food supply chains, public sector food procurement, impact assessment, sustainability, agri-food supply chains

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HORIZON 2020



Strengthening European Food Chain Sustainability by Quality and Procurement Policy

Deliverable 5.2:

ASSESSING THE CONTRIBUTION OF FQS TO RURAL ECONOMIES AND TERRITORIAL COHESION BASED ON THE CASE STUDY ANALYSIS

February 2019

Contract number	678024
Project acronym	Strength2Food
Dissemination level	Public
Nature	R (Report)
Responsible Partner(s)	UniPr
Author(s)	F. Arfini, V. Amilien, V. Bellassen, A. Bodini, M. Boehm, S. Chiussi, P. Csillag, E. Cozzi, A. Curzi, M. Donati, L. Dries, M. Druet, M. Duboys de Labarre, H. Ferrer, J. Filipović, M. Guareschi, L. Gauvrit, C. Gil, M. Gorton, V. Hoang, M. Hilal, K. Knutsen Steignes, A. Lilavanichakul, A. Malak-Rawlikowska, E. Majewski, S. Monier-Dilhan, M.G. Mancini, P. Muller, O. Napsintuwong, K. Nikolaou, A. Nguyễn Quỳnh, A. Olper, I. Papadopoulos, S. Pascucci, J. Peerlings, V. Raimondi, A. Török, T. Poméon, B. Ristic, Z. Stojanovic, M. Tonnig, M. Veneziani, G. Vittersø, A. Wilkinson.
Keywords	Public Good, Externalities, Indicators, food quality schemes, organic, geographical indications, impact assessment, sustainability, agri-food supply chains, region, performance, multi-criteria assessment

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The conceptual framework

The use of indicators

The public goods

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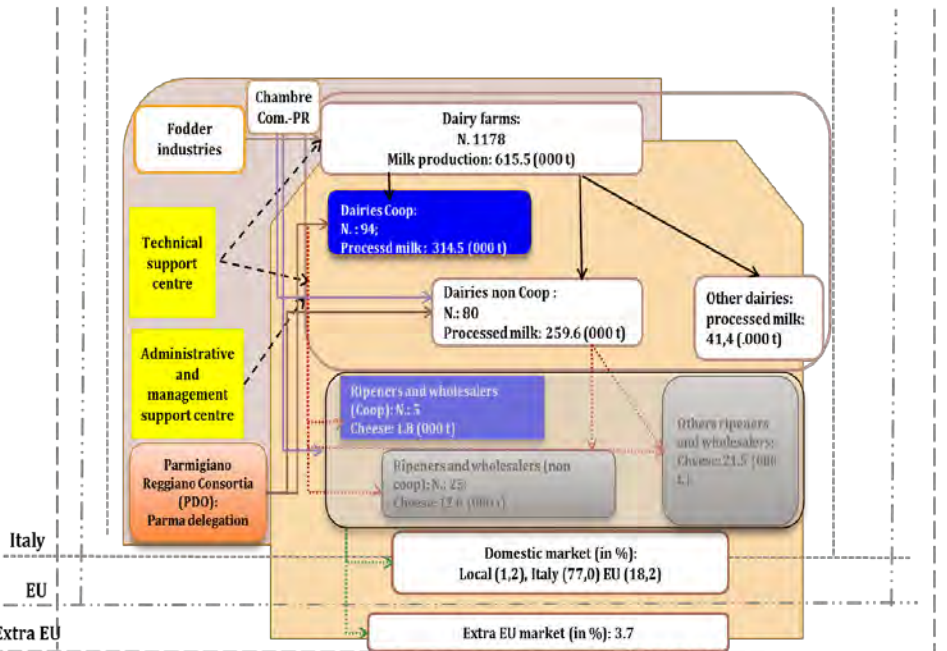
How could the sustainability performance of GI production be verified?

- A common conceptual framework which links together: i) Area of production, ii) Value chain, iii) Governance structure; iv) Research center and v) Stakeholders: Local Agrifood System (LAFS);
- A shared methodology to assess sustainability by: i) defining set of environmental, social and economic indicators; ii) defining a methodology suitable to their assessment; iii) data collection and elaboration; iv) communication to internal and external stakeholders.
- A “*commitment*” by GI Groups.

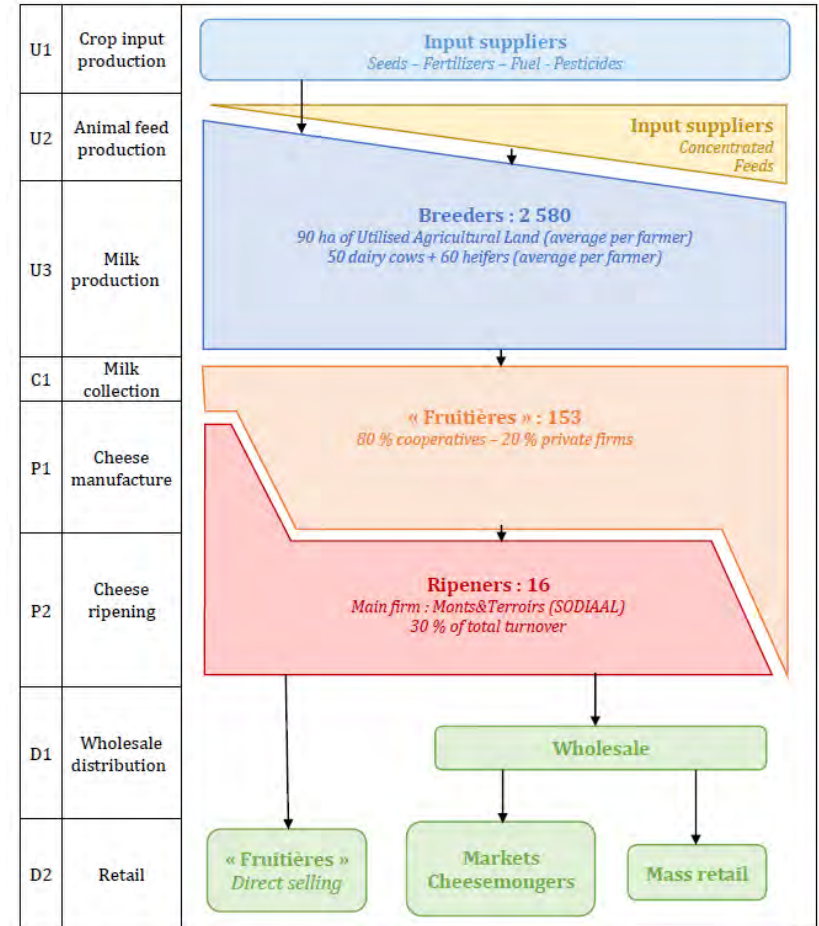


Local Agrifood System and Value Chain

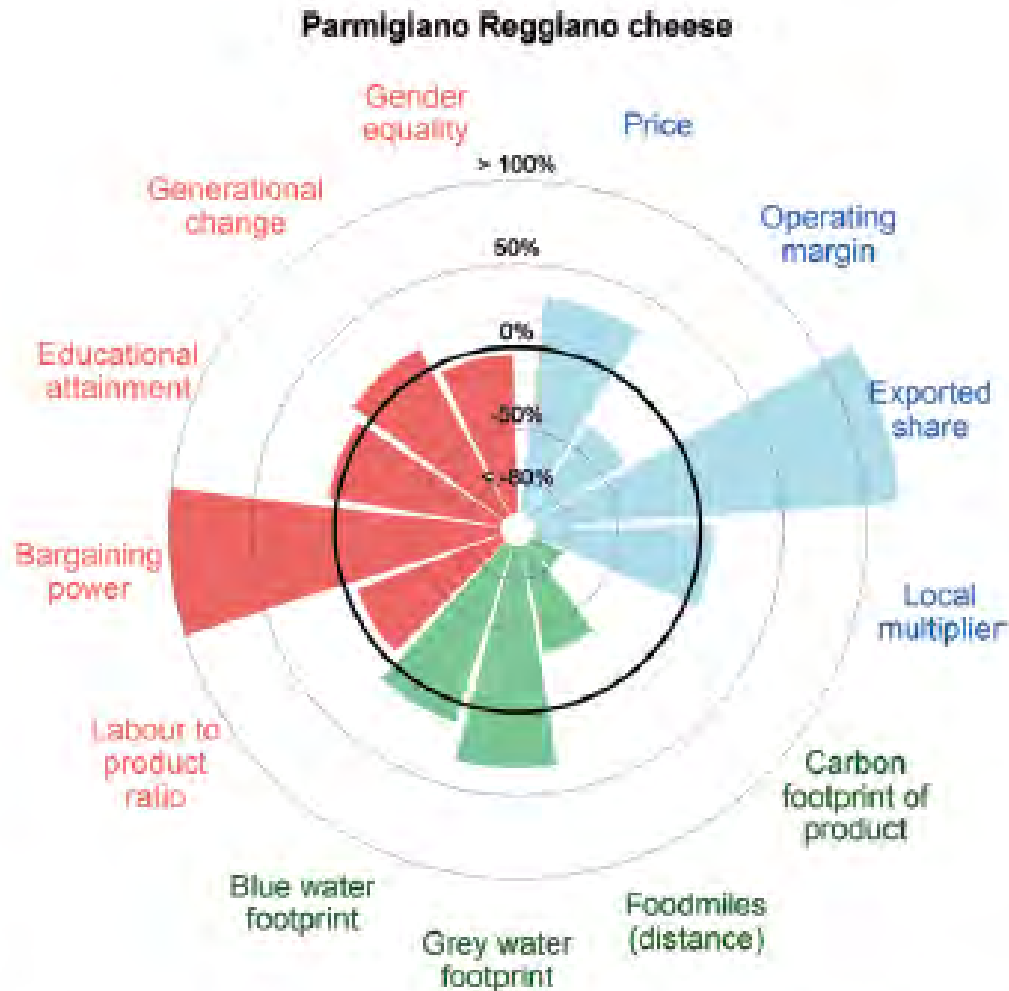
Parmigiano Reggiano LAFS



Comté value chain



Comparison between products and technologies

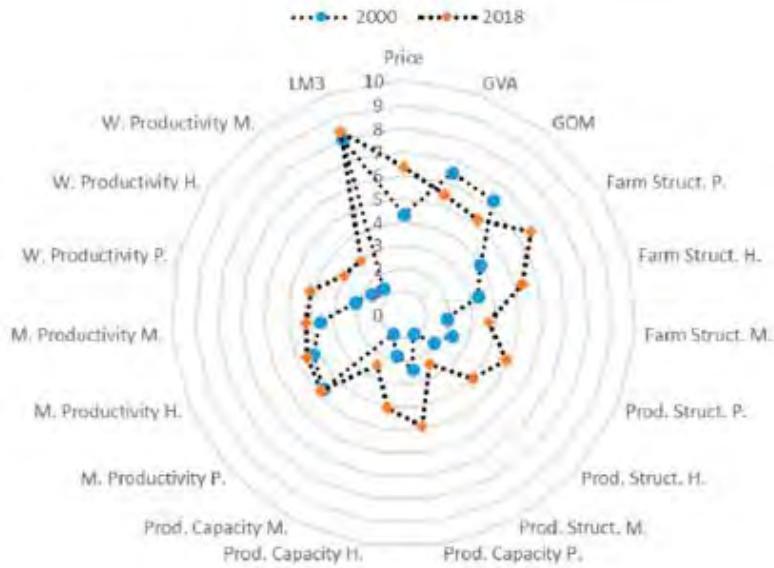


Arfini, F., Bellassen, V. (2019).

Fig. 3 Sustainability performance of Parmigiano Reggiano PDO cheese (supply chain averages). (Each indicator is expressed as the difference between Parmigiano Reggiano PDO cheese and its reference product. For environmental indicators, for which lower is better, the opposite of the difference is displayed (e.g. +20% when the carbon footprint is 20% lower))

Comparison between years

ECONOMIC INDEX FARM LEVEL



ECONOMIC INDEX PROCESSING LEVEL



Parmigiano Reggiano Cheese

Arfini, F. at all, (2019).



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An holistic approach to assess the sustainability of GIs

Measuring the **level of sustainability** of different production systems (**Food Quality Schemes – FQS**), including Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), and organic products
A number of **52 products** was investigated with 150 variables refined into the **23 indicators**



The landscape as indicator of public good



Stanislao Farri: the Parmigiano Reggiano landscape



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Further information

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- ❖ Facebook: [@Strength2Food](https://www.facebook.com/Strength2Food)
- ❖ YouTube: [via SciFoodHealth](https://www.youtube.com/viaSciFoodHealth)

Thank You!



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Thank you for your attention!
Any questions?

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