A COLLECTIVE MARKETING STRATEGY TO ASSESS THE SUSTAINABILITY OF GEOGRAPHICAL INDICATIONS.

THE CASE OF PARMIGIANO REGGIANO PDO

Montpellier, France – 5/8 July 2022
1. ENVIRONMENTAL, SOCIAL AND ECONOMIC SUSTAINABILITY

Modern food systems features:
- Global supply chains
- Food production specialization, industrialized agriculture
- Monoculture and intensive animal farming system

Several negative impacts:
- Environmental integrity
- Food security VS food waste / malnutrition and obesity
- Producers-consumers relationship removal
- Organoleptic quality loss
- Animal and vegetal biodiversity loss

Food systems sustainability: an increasing relevant issue
2. GEOGRAPHICAL INDICATIONS

- Alternative food systems, fair trade value chains, small scale producers and traditional products are emerging as valid substitute opportunities.

- Consumers have high expectation level towards GIs > confirmed by more than 10,000 GIs registered worldwide.

- In Italy the consumption of GIs has meaningfully increased during the last ten years, showing consistent export values, and contributing up to the 20% of the national agri-food sector economy (ISMEA, 2020).
THE RELATIONSHIP BETWEEN GIs AND SUSTAINABILITY

- Sustainability
- Quality
- Territory
  - Soil
  - Weather
  - Landscape
- Community
  - Local and traditional knowledge
- Tradition
  - Artisanal practices
- Identity
  - Gastronomic heritage
- Origin
  - Rural economy
  - Skilled labour force
- Transparency
- Uniqueness
  - Distinctiveness
- Reputation
  - Tourism
- Biodiversity
  - Local varieties
THERE IS A LACK IN MONITORING, ACKNOWLEDGE AND FRAME ALL THE DIMENSIONS OF THE SUSTAINABILITY BY THE STAKEHOLDERS OF GI's.

Therefore, there is a lack of capacity in properly COMMUNICATE the actual sustainability of the GIs to the consumers.

HOW TO ESTABLISH A SINGLE SUSTAINABILITY ASSESSMENT APPROACH.

- Case-by-case evaluation
- Contextualization
PARMIGIANO REGGIANO PDO SUSTAINABILITY ASSESSMENT

Parmaigiano Reggiano Cheese Consortium

INTERNAL EVALUATION
Social and economical sustainability
Continuous improvement

EXTERNAL COMMUNICATION
Environmental sustainability and animal welfare
Marketing strategy

CFPR BRAND MANIFESTO

5 SUSTAINABILITY PILLARS

1. ENVIRONMENT
2. ANIMAL WELFARE
3. NUTRITION AND WELL-BEING
4. COMMUNITY
5. TERRITORY

PILOT PROJECT

• 3 PRIVATE DAIRIES (farm dairies)
• MOUNTAIN/PLAIN/HILL AREA
• FAO-SAFA guidelines
• Strength2Food indicators
VARIABLES

FARM
- UAA/AA
- Forage area/ UAA
- Fodder varieties
- % Internal fodder
- Animal density
- Water conservation
- Irrigation techniques

ENVIRONMENT
- % Re-used serum
- % food loss
- Separate collection
- Fuel
- Solar panels

ANIMAL WELFARE
- Cow housing
- N. boxes/cow
- Mq/cow
- Interpartum period
- Animal feed
- Milking system

NUTRITION AND WELL-BEING
- N. tourists
- PGS certification

DAIRY
- 1° and 2° category cheese wheels
- % salt
- % fat
VARIABLES

**FARM**
- Starting activity
- Working family members
- Average age
- External employees
- Employment rate
- % Male employees
- % Foreign employees
- Qualification degree
- Production efficiency
- Value implementation

**COMMUNITY**
- N. fairs and events/local markets 2018
- Local community projects involvement
- CFPR participation value

**SOIL**
- Alfalfa/SAF
- Stable meadow/SAF
- Internal crops
- Organic/convventional/integrated production system
- Organic matter value
- Fertilizers

**SOIL**
- Soil fertility increase
- Soil management
- Manure management
- Biodiversity preservation
- Pests and disease management

**ECONOMY**
- Rent/property SAU
- Milk price
- % animal GSP/Tot GSP
- Sales values and channels
- N. buyer

**ECONOMY**
- Buyer relationship value
- Gross margin
- Revenues > costs (5 years)
- Annual meetings

**DAIRY**
- External employees
- Employment rate
METHODOLOGY

1. DATA COLLECTION
   - Sources: producers interviews / CFPR
   - Quantitative/ qualitative data
   (\rightarrow conversion of qualitative data: Likert scale)

2. DATA NORMALIZATION
   - Index from 0 (lower impact) a 1 (higher impact)
   - Dimensional indexes: specific indicator performance
   - Synthetic indexes: overall sustainability performance

3. DIMENSIONAL/SYNTHETIC RADAR CHARTS

Environmental data (farm)

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Dimensional radar chart – Environment (farm)
RESULTS

**HILL DAIRY:** environmental sustainability (n. fodder varieties/forage self-sufficiency/crop diversification) and animal welfare (space width per cow)

**PLAIN DAIRY:** territory economy (rent/property UAA and total milk production) and community sustainability (employees production efficiency)

**MOUNTAIN DAIRY:** animal welfare (animal feed) and nutrition and well-being (PGS).

**HILL DAIRY:** environmental sustainability (methane), animal welfare (communication activities), nutrition and well-being (1 and 2 category cheese wheels).

**MOUNTAIN DAIRY:** community (n. of fairs and events), animal welfare (communication activities).
CONCLUSIONS

- Overall positive performance on animal welfare dimension (wide boxes, free range and high-quality feed products)
- Low intensity livestock pressure on the soil.
- Local territory impact (identity)
- Surrounding community involvement
- Internal and external social sustainability (family members involvement, low average age, inclination towards new technological changes, school and events participation level)
- High production efficiency
- Alfalfa cultivation potentiality

Overall sustainability level of the three samples: medium-high

- Energy sources
- Employed fuel
- Water consumption
- % male employees
- Employement rate
- Commercial strategies and market stability

✓ Approach: appropriate >>

It highlights the most efficient elements of the system and, at the same time, the most critical issues.

✓ Need for model integration with cooperative and artisanal dairies

✓ Time extension and data update of the evaluation (3/5 years).
THANK YOU!