European Conference: Biodiversity in Food Supply Chains

Scaling Biodiversity Footprints and its Transfer into Practice

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Barilla G. e R. F.lli spa

Barilla in the world

9,040
BARILLA
PEOPLE
*this data includes employees from
Pasta Evangelists and Barilla Mexico

20
BRANDS
* Year To Date

30
PRODUCTION
DISTRICTS
*that envisage one or more sites

15 IN ITALY
15 ABROAD

Food for
Biodiversity

Sustainable Supply Chain

67%

OF THE RAW MATERIALS

ORIGINATE FROM SUPPLY CHAINS
MANAGED RESPONSIBLY

89%

**ORIGINATE FROM SUPPLY
CHAINS MANAGED
RESPONSIBLY**
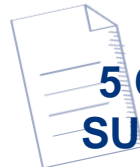
100%

OF EGGS

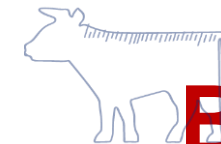FROM
CAGE-FREE HENS

8,500

FARMS INVOLVED

IN SUSTAINABLE
AGRICULTURE PROJECTS

**5 CHARTERS FOR THE
SUSTAINABLE FARMING**

OF THE MAIN INGREDIENTS:
DECALOGUE FOR THE SUSTAINABLE
CULTIVATION OF QUALITY DURUM WHEAT,
THE MULINO CHARTER, THE HARRYS CHARTER,
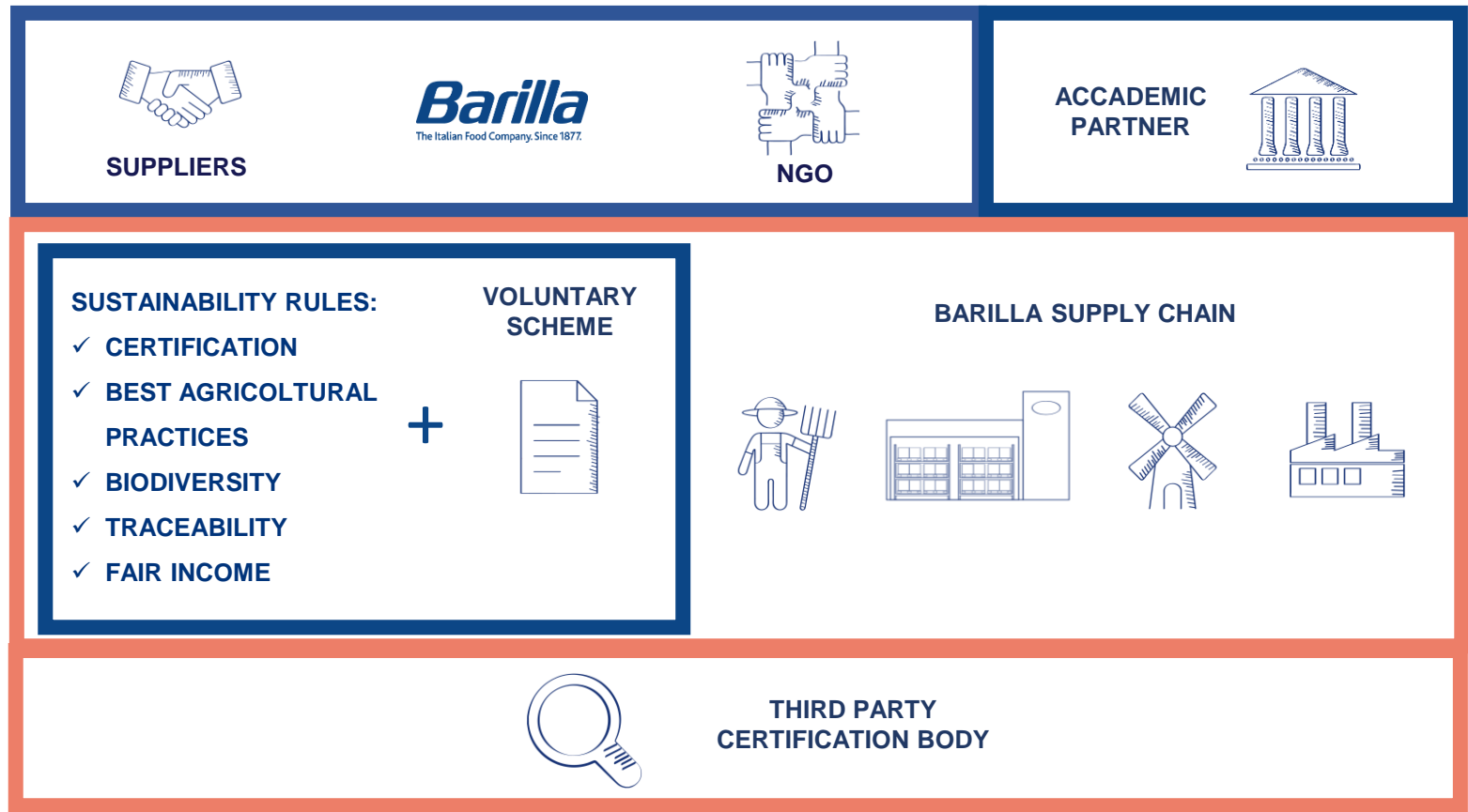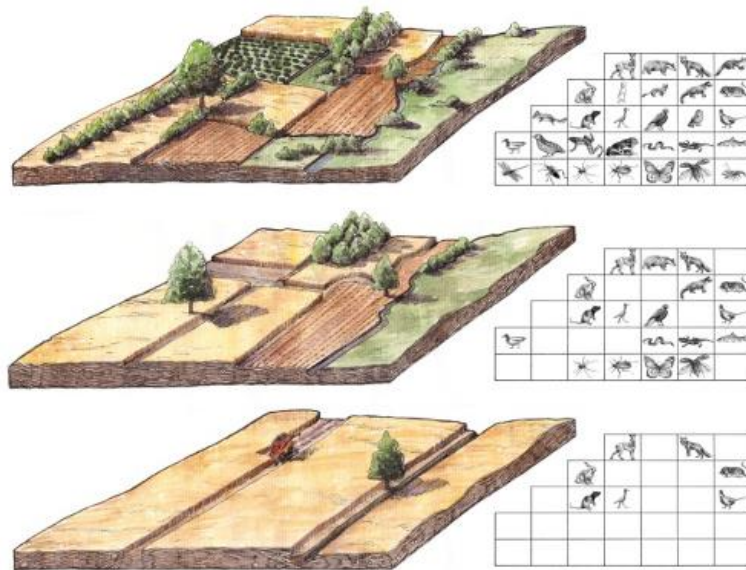**THE BASIL CHARTER**, WASA CHARTER

BBFAW

**ANNUAL SURVEY OF
ANIMAL BASED RAW
MATERIAL SUPPLIERS**

Food for
Biodiversity

Barilla Sustainability Structure

- **Introduction of biodiversity practices** with the inclusion of crop rotation, **flower strips** (in addition to EFA – Ecological Focus Area), 10 sustainable cultivation rules. Use of a DSS (decision support system) platform to improve and optimise farm management practices and inputs use.

SUPPLIERS

Barilla — The Italian Food Company. Since 1877.

NGO

ACCADEMIC PARTNER

SUSTAINABILITY RULES:
- ✓ CERTIFICATION
- ✓ BEST AGRICOLTURAL PRACTICES
- ✓ BIODIVERSITY
- ✓ TRACEABILITY
- ✓ FAIR INCOME

VOLUNTARY SCHEME

+

BARILLA SUPPLY CHAIN

THIRD PARTY CERTIFICATION BODY

MULINO BIANCO

La Carta del Mulino
V6.0 - Raccolto 2023

PESTO Barilla

CARTA DEL BASILICO Barilla

Food for Biodiversity

Result achieved

Outcomes:

- **Conversion** of 1800 common wheat hectares into flower strips;

- **60000 hectares of common wheat** cropped following sustainable practices;

- **2600 farms involved** and certified according to sustainability rules.

- **Improvement of landscape** diversification, development of animal shelters, contribution to decrease soil depletion.

- Impact positively on soil structure and fertility, thus allowing overall **ecosystem improvement**

- **Replicable** and scalable to grains and other arable crops

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Barilla/CircHive

ACTUAL:

- Direct contact with farmers
- Huge dataset
- 2000 ha of biodiversity areas
- Claim on pack

NEEDS:

- Objective measure of biodiversity commitment
- Reporting performance with standard methods
- Continues improvement
- Consistency to marketing message

CircHive is a Horizon Europe project that will help businesses and the public sector recognize, measure and report on the value of nature.

1) Ultimate goal of CircHive: mainstreaming the use of biodiversity footprinting (BF) and natural capital accounting (NCA).

2) Integrated approach through:

- Methods
- Models
- Guidance developed, improved, and piloted with case study partners

3) Creation of a user community of frontrunner organizations (BEEHive):

- Organizations that have internalized biodiversity-positive approaches
- Recommend these approaches in measuring, reporting, and strategy setting

Food for Biodiversity

Outcomes

CONSUMERS

- Enhance supply chain commitment

- Product story supported by concrete and standardized measures

REGULATION

- Stimulate extension and replicability of the biodiversity standard

- Institutional recognition

ENVIROMENT

- Objective measure of biodiversity commitment

- Biodiversity Footprint

- Comparison with standards for improving actions

COMMUNITIES RELATIONS

- Comparison with other case studies for cross fertilization and networking

Food for Biodiversity

WP1: Data | WP2: Methods | WP3: Decision-making

Common data format

Qualitative estimate

Ecosystem service 1 — Activity 1 — Impact 1
Ecosystem service 2 — Activity 2 — Impact 2
Ecosystem service 3 — Activity 3
Ecosystem service N — Activity 4 — Impact N

Modelled with economic activity data (IO models)

Modelled with physical activity data (LCA)

Freshwater pollution, Other, Climate change, Water use, Land use — **Pressure contribution**

Use, Transport, Production, Raw materials, End-of-life — **Impact in the value chain**

Site-level: Geospatial data and public information

Site-level: Qualitative surveys

Site-level: Quantitative surveys

Priority regions
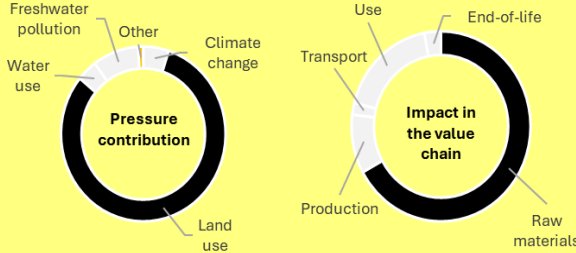
Accounting over time

Location	SoN estimate	Extent			Condition		
		Y1	Y2	Yn	Y1	Y2	Yn
1	Survey						
2	Regional geodata						
3	Modelled						
4	Qualitative						
...	...						
Conso.	Losses	...					
	Gains	...					
	Net	...					

Biodiversity Footprint

Natural Capital Accounting

Identify nature-related issues

Prioritize pressures

Prioritize parts of the value chain

Understand potential impacts

Prioritize locations

Understand actual impacts

Account for positive impacts of restoration

Risks and opportunities

Scenarios

Anticipated financial effects

Strategy and business model

Transition plan

Actions

Improved decision making

Reporting

CircHive

Food for Biodiversity

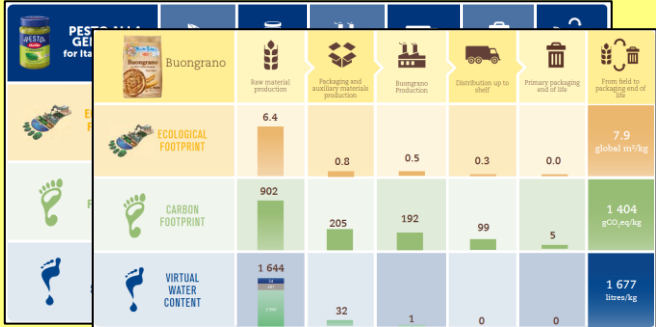| WP1: Data	WP2: Methods	WP3: Decision-making

Common data format

Qualitative estimate

Investigating **biodiversity issues** in the context of:
- Agrochemical inputs
- Intensive grain cultivation

To measure resulting impacts from standard (industrial) **agricultural practices**:
- **Soil depletion; Soil degradation**
- **Plant biodiversity loss**
- **Animal biodiversity loss**
- **Lack of pollination activity**

Modelled with economic activity data (IO models)

Modelled with physical activity data (LCA)

Barilla has conducted over **95 Environmental Product Declarations.**, For semolina and pesto, **raw material production** has the largest **carbon**, **water**, and **ecological footprint.**

Site-level: Geospatial data and public information

Site-level: Qualitative surveys

Site-level: Quantitative surveys
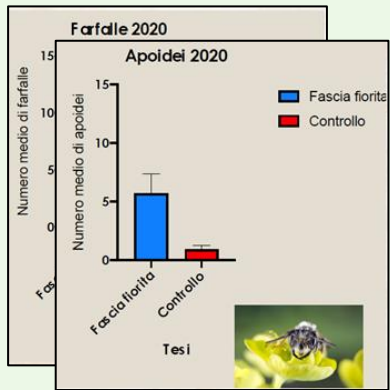
Farms with flower strips have higher abundance and diversity of indicator species (butterflies, bees, wasps).

Biodiversity Footprint

Natural Capital Accounting

Improved decision making

Goal Show such information on relevant product packaging in a way that complies with the **Green Claims Directive**
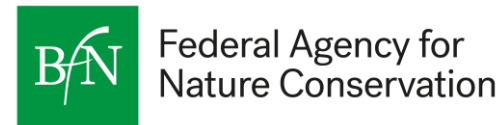
Goal Show **biodiversity improvements** from restoration projects

Goal
- Report **biodiversity** aligned with **SR** requirements such as **CSRD**
- Consistent **accounting** = track **progress**, set **targets**, prioritize **action**

CircHive

Food for Biodiversity

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Hosts

Food for Biodiversity

Global Nature Fund

Co-Hosts

B&B European Business & Biodiversity Platform

Bundesvereinigung der Deutschen **ERNÄHRUNGS INDUSTRIE**