Workshop
Farm Sustainability Data Network
Brussels, 12 February 2025

Concetta Cardillo, Luca Cesaro, Sonia Marongiu
CREA – Policies and Bioeconomy
concetta.cardillo@crea.gov.it
luca.cesaro@crea.gov.it
sonia.marongiu@crea.gov.it

Positive experiences with FSDN
The Italian survey.

RICA

- **FSDN variables in the Italian survey**
- **Use of FSDN variables for environmental and social analysis**
- **Use of FSDN for CAP Management**
- **Dashboard for farmers and tools for the benchmarking**
- **Data sharing**

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RICA

ITALIAN FADN VS EU FADN

- Higher number of variables

- High level of details for certain variables

- Estimation of costs and gross margin for production processes

Categories	EU FADN	IT FADN
Types of machinery and equipment	0	300
Types of farm buildings	0	70
Types of soil (physical characteristics and fertility)	0	20
Arable and permanent crops	<100	380
Animal species and categories	<30	100
Types of crop products (main and processed)	<50	54
Types of livestock products (main and processed)	<10	35
Categories of technical inputs (fertilizers, seeds, etc.)	<25	110
Subsidy types (EU, National, Regional)	<300	500
Total Variables (approximatively)	1,000	>2,500

Environmental variables

Water volumes of irrigation and fertigation

Unit of N, P and K used in a single crop

Use of crop protection products (toxicity class)

Type of land use (minimum tillage/no-tillage)

Cover crop (e.g., date of seeding, date of harvest)

Altitude of farm (in m asl)

Details on the use and production of renewable energy

Social Variables

Description of farmer's family (farm members, relationships, role, off-farm income, etc.)

Gender balance: of manager, family members, seasonal workers

Nationality of seasonal workers

Educational level of farm manager

Interaction with Producer Associations, Consortia, territorial entities

Certifications: territorial marks (PDO, PGI, TSG) for productions and products
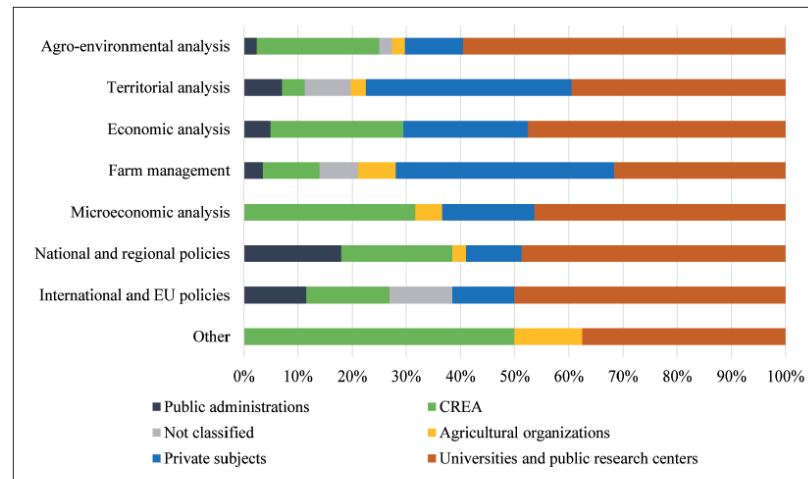
Marketing channel

The Italian FADN collected more information than the EU FADN → the transition to FSDN is not extended to all the variables. Some environmental and social variables are already collected in the Italian system (FSDN: different detail, different aggregation, etc.).
Reasons → informative needs coming from the national research and policy system.

USE OF FSDN DATA FOR ENVIRONMENTAL AND SOCIAL ANALYSIS

The analysis of the use and users of FADN data in Italy highlighted the importance of the data for **agro-environmental analysis** and **territorial analysis.** In Italy, the most important users of FADN are the Universities and the public research centers (CREA → use for the analysis of national and regional policies impacts).

The availability of a higher number of environmental and social analysis is important in the Italian system (publication on reports, policy briefs, scientific publication, dissemination for farmers and advisors, etc.).

Source: our elaboration on direct survey.

Guerra in Ucraina:
gli effetti sui costi e sui risultati economici delle aziende agricole italiane
aprile 2022

LE AZIENDE AGRICOLE IN ITALIA
Risultati economici e produttivi, caratteristiche strutturali, sociali ed ambientali
RAPPORTO RICA 2021 | PERIODO 2016-2019

La RICA in Trentino: al via la rilevazione per l'anno contabile 2021

GRANO DURO: costi di produzione, prezzi, margini e aiuti
RICA Italiana - 2016-2020
dicembre 2021

Use and users of FADN data in Italy

Sonia Marongiu*,a, Barbara Bimbatia, Mauro Santangeloa

a CREA, Council for Agricultural Research and Economics, Research Centre for Agricultural Policies and Bioeconomy

Politiche e Bioeconomia

USE OF FSDN DATA FOR ENVIRONMENTAL AND SOCIAL ANALYSIS

USE OF FADN DATA FOR THE EVALUATION OF AGRODIVERSITY IN THE ITALIAN FADN FARMS

Objective: classification of FADN farms in three levels of agrodiversity (high, medium, low) on the basis of a selected set of variables → easy index, repeated each year

Period: 2016-2020

IT FADN/FSDN variables: (i) Crop diversification and crop combination (six clusters); (ii) number of varieties; (iii) intercropping; (iv) woodlands or EFA; (v) livestock and combination of animals; (vi) nectar producing plants

Biodiversity: difficult to assess with FADN data (local varieties?)

1 = present; 0 = not present

GLOBAL SCORE OF AGRODIVERSITY FOR EACH FARM: LOW (less than 2.5) – MEDIUM (2.5-5.0) - HIGH (more than 5.0)

Total revenues and Net revenues in farms with high agrodiversity per Farm Type vs average value

- Higher values for farms specialized in arable crops, horticulture, permanent crops, livestock (bovines for milk), granivores

Legend: RTA in aziende con Alta agrodiversità; RN in aziende con Alta agrodiversità; RTA totale; RN totale

68.591
26.344

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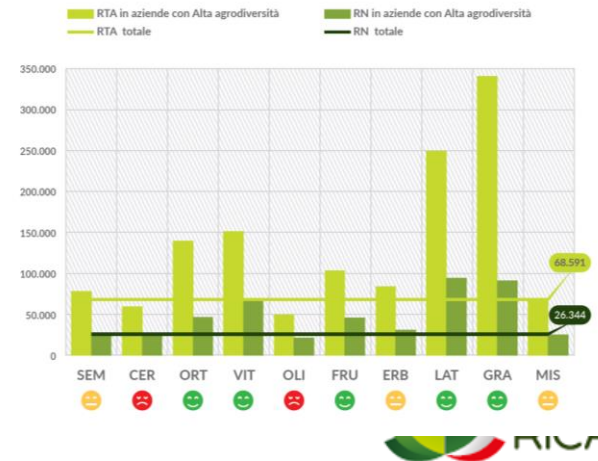
USE OF FSDN DATA FOR ENVIRONMENTAL AND SOCIAL ANALYSIS

OFF-FARM INCOME

The Italian FADN collects information regarding the farm's family in term of components, farm employment and **off-farm income**. A specific analysis based on the off-farm incomes has stressed the importance of this category in the assessment of global farm income.
https://agriregionieuropa.univpm.it/it/content/article/31/51/luso-della-banca-dati-rica-lanalisi-dei-redditi-extra-agricoli-delle-famiglie#:~:text=La%20Banca%20dati%20Rica%20(BD,con%20cui%20esso%20si%20forma

WOMEN WORKING IN AGRICULTURE (REGIONAL ANALYSIS)

Gender, incidence of OGA on total farm activity, scholarization have been considered in an interesting analysis regarding women in agriculture.
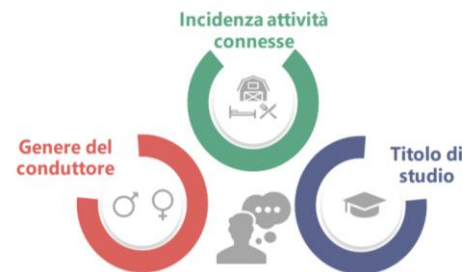
USE OF FADN FOR THE ESTIMATION OF THE CARBOON FOOTPRINT AT FARM LEVEL

Methodology to reconstruct the GHG emission and the carbon footprint at farm level over the time, by farm typologies and territories (ICAAI/RICA project).

IMPRONTA CARBONICA
AZIENDE AGRICOLE ITALIANE

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RICA

USE OF FSDN DATA FOR ENVIRONMENTAL AND SOCIAL ANALYSIS

Variable IT FADN: number of components of family members

- ISTAT (National Institute of Statistic) estimates the poverty threshold on the basis of the number of family members (from 1 to 7)

- ISTAT: average household expenditure for Sicily and Italy

- Net Revenue of conventional vs organic farming per Farm Type and Economic Dimension (IT FADN)

Figura 1 - Redditi netti delle aziende convenzionali, soglia di povertà e livello di spesa delle famiglie in Sicilia ed in Italia
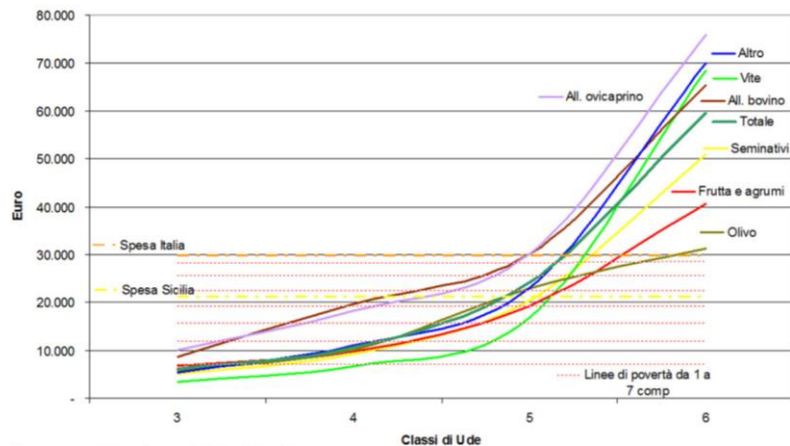
Fonte: nostra elaborazione su dati Inea Rica e Istat

Figura 2 - Redditi netti delle aziende biologiche, soglia di povertà e livello di spesa delle famiglie in Sicilia ed in Italia

Fonte: nostra elaborazione su dati Inea Rica e Istat

Politiche e Bioeconomia
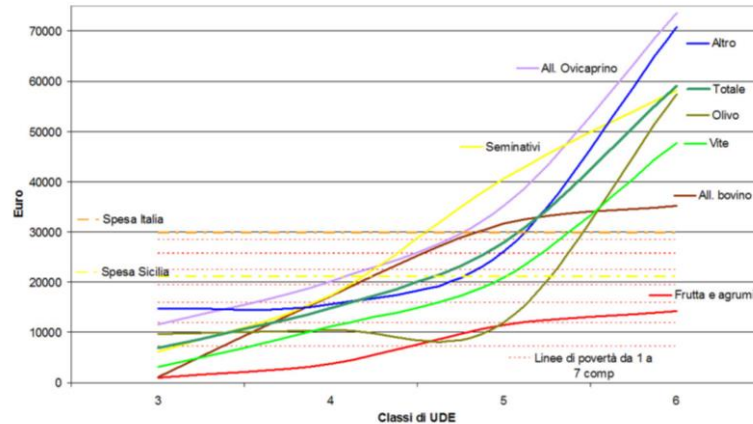
RICA

USE OF FSDN FOR CAP MANAGEMENT

Data collected through FSDN are also used for the CAP management.

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https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/4278

- Italian FSDN is used for the evaluation of rural development programmes and rural development policies. Data are used in the quantification of most important indicators, for the justification of payments, for the impact analysis of the measures applied at farm level (counterfactual analysis, georeferentiation, gross margin per production process).

L'utilizzo della RICA
per la valutazione di programmi
di sviluppo rurale

Regular Articles

Vol. 23 No. 3 (2021): Current use and new perspectives for the Farm Accountancy Data Network

The use of FADN methodology to support the evaluation of business development plans in the RDP Sicily 2014-2020

Alessandra Vaccaro *, Ida Agosta *, Alessandro Montelelone *, Antonio Giampaolo *, Dario Macaluso *

DOWNLOAD PDF

DOI
https://doi.org/10.3280/ecag2021oa13149

PSAWEB → a web application based on FADN methodology, used by the Managing Authority of RDP in Sicily (2014-2020) to make available a Farm Development Plan, mandatory for the investments under the sub-measures 6.1 (Business start up aid for young farmers), 4.1 (Investments in agricultural holdings), 6.4 (Investment in creation and development of non-agricultural activities). Cooperation between MA and LA (CREA-PB).

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RICA

Dashboard for farmers

- A web tool only for farms participating in FADN

- Access: CUAA (identification number) + individual PIN (generated by the LA)

Use: (i) monitoring the results of all the accounting years ; (ii) benchmarking (Farm Type, Macroarea, Economic Size classes)

https://cruscottoaziendalegaia.crea.gov.it

The farmer can continue to access the Dashboard even after leaving the FADN sample

The access credentials are transmitted to the farmer by certified e-mail, not through the data collector, in compliance with the rules of the GDPR.

The Farm dashboard (Cruscotto aziendale) is a online tool created for the farms participating to the Italian FADN. Famers can have a feedback on their accounting and performance results.

DASHBOARD FOR FARMERS (FEEDBACK)

Cruscotto Aziendale di GAIA
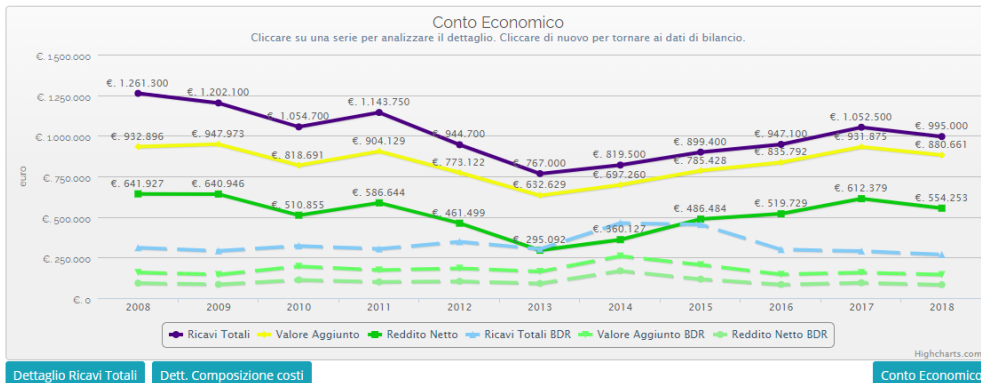
The farm can visualize the calculation of economic and financial parameters (all the years of FADN participation).

Outputs:

- Financial statement (Balance Sheet + Profit and Losses)

- Farm indexes (based on the Financial Statement results

- Time series for the most important economic results of the farm and indexes.
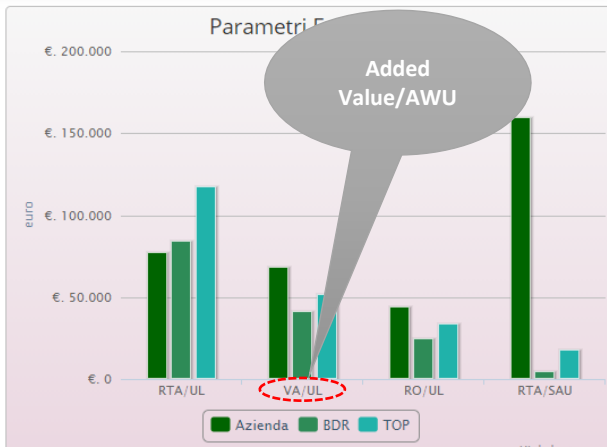
DASHBOARD FOR FARMERS (BENCHMARKING)

The farm indexes are compared with the results calculated as average for the same "benchmarking group" with the same Farm Type, Economic Size and Macroarea (north, centre, south).

Farm Type = TF14 level

The comparison is made among the farm, the average benchmarking group (BDR) and the "best" group having the same characteristics (TOP).

The graph compared the economic indices of the farm with the average data of the benchmark group of the Italian RICA (BDR) database and the data of the best farms of the same benchmark group (TOP). TOP farms are extracted, using the quartile method, by evaluating the GFI / AWU index.

DATA SHARING

The Italian FADN system offers several examples of data sharing with and between other systems and to final users.

The data flows «from» and «to» FADN.

TO FADN → CLASSCE is an application used in Italy for the farm classification according to FADN Rules. Data collectors (or other subjects) can classify the farm on the basis of the area of crops and number of animals. **Some sections of the Farm Register are integrated in this tool and data can be used to verify farm structure or to decide if the farm is included or not in the sample**.

FROM FADN → the survey RICA-REA was made under UE Reg. 220/2015 (Economic Accounts for Agriculture- EEA)

RICA/FADN=farms with more than 8,000 € SO

REA=farms with less than 8,000 € SO

FADN methodology was used to collect REA farms (a dedicated web tool, a simplified version of FADN.

DATA SHARING

FADN data shared with final users – several level of sharing and access.

Increasing processing and aggregation of raw data →

| Datawarehouse |

| Italian FADN database for RD evaluation |

Increasing complexity and details →

| Customized tables (data requested for a group of selected variables) |

| BDR on line (Italian FADN database GAIASys (raw data, not processed) |
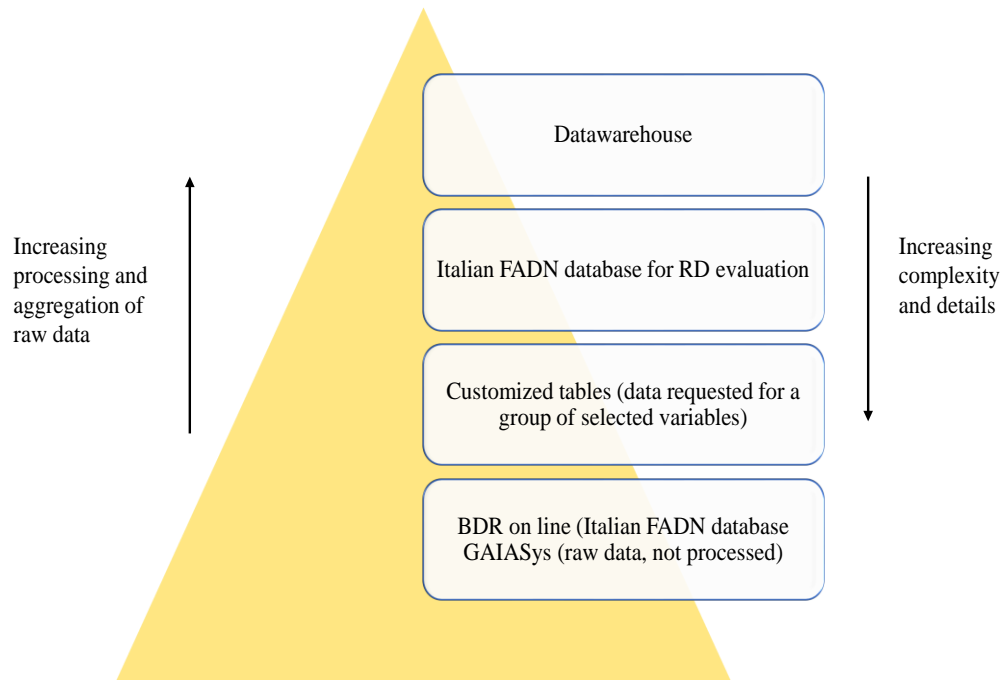
Customized tables (→ request form limited to a set of variables) and the access to the BDR on line (→ after an agreement with the users) are the most important source of information for the research system.

Users and use of the Italian FADN have been monitored through (i) an analysis of the request forms (2011-2020) and (ii) a questionnaire for the recorded accounts having accesso to the platform.

THANK YOU FOR YOUR ATTENTION

Concetta Cardillo – concetta.cardillo@crea.gov.it

Luca Cesaro – luca.cesaro@crea.gov.it

Sonia Marongiu - sonia.marongiu@crea.gov.it