



DATA MANAGEMENT FOR MONITORING AND EVALUATION IN EMILIA-ROMAGNA RDP

**Good practice workshop:
Targeted data management for evidence-based
evaluation in Rural Development**
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Andrea Furlan
Regione Emilia - Romagna

1. Structure of Italian system
2. Data collection and management in Emilia-Romagna
 1. IT system for RDP
 2. Subjects involved
 3. Datawarehousing
 4. Main outputs
3. Comparison – links with National system
4. Use of monitoring data for evaluation
5. Preparing for ex-ante 2014-2020

IT system for RDP – Base informations

Farm data → register office informative system

- Fiscal data (Farm Unique Code, legal form, localization etc.)
- Holder → gender, age, young farmer
- Physical data
 - Land managed
 - Livestock
 - Quality productions → organic, PDO (Protected designation of origin), PGI (Protected Geographical Indication) ecc.

Geographical informations → GIS (part of IACS)

- Cadastral data
- Land use (from aerial photography - aggregated)
- Cartography used in RDP:
 - Natura 2000, Nitrate Vulnerable zones, Parks etc.
 - Cadastral parcel included in an area

IT system for RDP – RDP informations

RDP Managing data → Paying agency informative system

- Structure: different modules for RDP measures - Procedural phase (presentation, commitment, payment etc.)
- Informations:
 - Specific data related to RDP measures → indicators
 - Detailed land use → crop-species and variety for every cadastral parcel
- All the informations needed (management and monitoring) → included in the system
 - No additional survey for monitoring data
 - Monitoring unit involved in the construction of application modules

IT system for RDP - links

GIS system



Register office system



Paying Agency (AGREA) Systems
Applications - Payments



RDP Datawarehouse

REGIONAL LEVEL

Managing authority – Regione

- Administrative management
- Direct management of some measures
- Coordination local – national levels
- Monitoring and evaluation
- Informative system management:

Regional Paying agency (AGREA)

- GIS, application and payments system management
- Payments administrative management
- Coordination with National paying agency (AGEA)

Subjects involved

LOCAL LEVEL

Agricultural Assistance Centers

- Interface for farmers to
 - Update register office data
 - RDP applications presentation

Provinces

- 9 provinces
- Integrated rural local program →
 - local version of RDP
 - detailed selection criteria
- Responsible for commitments and controls

Local Action Groups

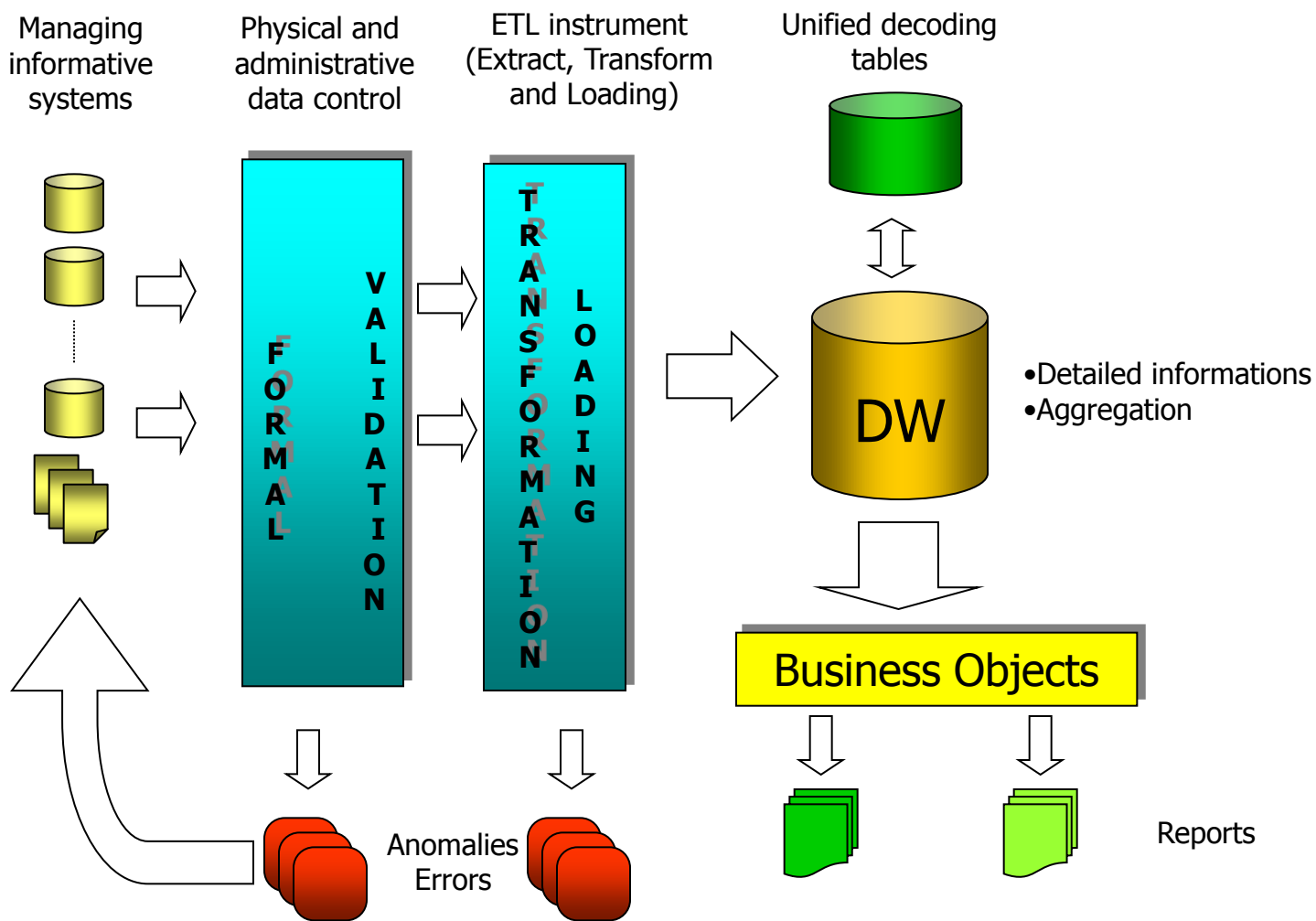
- 5 LAGs
- Responsible for commitments

Controls on monitoring data

Strategical issue to obtain reliable reports

- First control in acquiring informations → presentation – other procedural phases
- Commitments validation →
 - done by measures managers (Regione, Provinces and LAG)
 - under request of monitoring unit
- Correct management of procedural phases → support of monitoring unit to Paying agency
- DWH internal data controls → completeness - coherence

Monitoring data flow



DWH management

Time

- Dump from managing informative system: every month
- Publication of financial reports on web: every 3 months
- Annual reporting: every year

Reporting areas

1. **Financial** : N application committed, commitments (€), payments (€) for axis and measure, divided by year
2. **Physical**:
 - Indicators: N application, commitments (€), payments (€), area (ha) -
 - Measure, Action (sub-measures), indicators, type of investments, type of farm, etc.
 - Territorial reports: aggregation for municipality (all measures), disaggregation for parcel data (only area-based measures)
3. **Procedural**: financial informations for procedural phase (presentation, commitment, payment etc.)
4. **Transversal**: main financial and physical informations
 - Measure – Application: all axis-measures, 80.000 committed applications,
 - Beneficiaries – farms: unique number of beneficiaries, 22.000 beneficiaries

DWH management

Reports extraction and publication

1. Business objects:

- Business intelligence software: easy creation of reports from DWH
- Overall management and customization → reports complete set
- 4 users - monitoring and evaluation unit

2. Web reporting:

- Open source software for report construction – publication
- Financial - procedural reporting with limited choices (year, dates, measures)
- Access with username-password: 150 users – measures managers

3. Web site:

- Open consultation on www.ermesagricoltura.it
- Pdf financial reports updated every 3 months
- Annual implementation report

Role of the monitoring system in 2012

Institutional (requested by CMEF): indicators – annual report

Managing authority needs

- Update commitments and payments → follow the progress, reallocation of resources
- Answer to policy needs: specific territories - type of action
- Quick reaction to changing: Health Check - New measures - Earthquake
- Support to other subjects involved:
 - Main issue: with the same question every subject extract different data
 - Solution: the monitoring unit extract reports for ALL the subjects involved

Organization remarks

- Importance of a functioning system → human and technical resources dedicated
- Good relationships with other subjects involved
- Continuity of management and technical construction: dealing with complex objects

Comparison with national system



Structure (2012)

- 8 regions with regional Paying agencies
- 12 regions with national Paying agency

Connections between regional and national systems

- Every regional PA manage its own informative system
- All the PA (national-regional) share a part of informations via web-services (mainly for controls at national level)
 - Farm data file
 - Parcels - land use
 - Payments

Comparison with national system

Common issues

- Informative systems of PA are quite similar → same objects-informations and measures but differences for local specificities
- Data return to Managing authority → critical point, depending from organization and relationships

Strengths of regional system

- Closeness to local specificities → reduced costs for system management
 - measures not activated - crops not present
 - easier management of some measures (E-R: 10 agri-environmental measures)

Weaknesses of regional system

- Regions with national PA: problems in obtain data - content metadata
- Forced to build parallel systems
- Local sectors: at national level need of specific functioning system → problems for priorities
- Risk of cost duplication in overlays from regional-national levels

Use of monitoring data for evaluation

Evaluation specific reporting

- General (RDP level)
 - Transversal and financial : overall progress – farms characterization
 - Sheet with full data for every application
 - Procedural reports: effects of selection criteria
- Specific (measure level)
 - Sampling universe definition: specific reports with detailed informations
 - Area measures: contracts divided by type of action, parcels and crops
 - Integration of different measures: crop chain contracts with applications linked

Use of monitoring data for evaluation

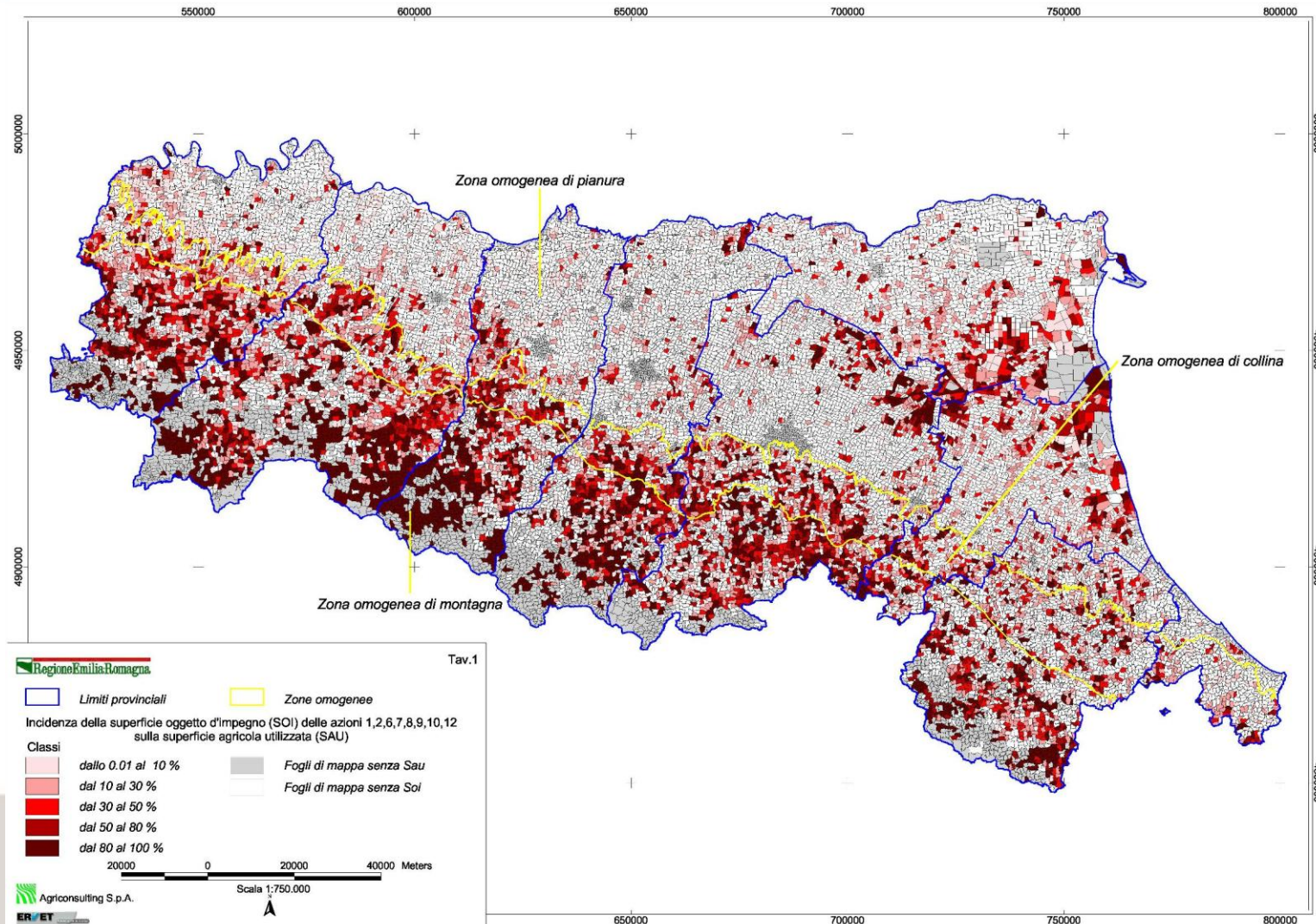
Area under successful land management - Result indicator n 6: report detail

- Specific annual reporting based on contracts divided by type of action, parcels and crops
- Base report used in almost all indicators for area based measures → R6, FBI, HNV, soil erosion, water quality, selection criteria analysis etc.
- Possibility to georeference informations at cadastral sheet level
- Manage overlay of different measures on the same physical area (i.e. 211 and 214)
- Integration with other sources → shape files from measures 226 – 227 (non productive investments)

Agri-environmental application mapping

Territorial unit: cadastral sheet (100 ha)

Indicator: area under contract / UAA - calculated for every sheet



Context data DB

Preparing for ex-ante 2014-2020

Needs

- Cover lackness in land use – statistical data
 - Non agricultural areas (forest – natural – urban) not managed in Paying agency systems
 - UAA in main environmental areas i.e. Natura 2000
- Detailed territorial data and time series
- Extend RDP DWH approach → good quality data on 25% of farms

Solution (in progress):

Alphanumeric - cartography geodatawarehouse

- Aggregator of different DB containing context data
- Input data for all farms - full regional cadastral cover - all measures first and second pillar
- 3 modules: Land use (parcel and crop) - Regional cartography - Farm data
- Updated once a year
- Integration of datawarehouse and GIS properties
- Outputs: tables, charts and maps

THANK YOU FOR YOUR ATTENTION

Andrea Furlan
Servizio Programmi, monitoraggio e valutazione
afurlan@regione.emilia-romagna.it