Geomatics technologies in support to the Common Agriculture Policy

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Archive image
Current year image
Conferencia Internacional
Información Geográfica y la PAC

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The Common Agriculture Policy

The CAP is the EU’s major policy instrument, impacting **agricultural practices, environmental sustainability**, and the **economic livelihood** of rural areas.

- Aid payments (1st and 2nd pillars) still the **largest single component** of the EU annual **budget**.

- Major CAP goal is the responsible and **sustainable use of rural resources**

- However, the correct **management and control** of these payments is a major task for Member States and the Commission.

→ GeoCAP provides technical support for CAP implementation
CAP expenditures 1980 - 2008

JRC Information Exchange day in Spain – 2° June 2010

Budget 2010

Total: 58 billions €

- 40 Billions Direct aids
- 14 Billions Rural development

8.1 million aid applications in 2010
CAP organization and management

JRC Information Exchange day in Spain – 2° June 2010

1. **DG AGRI / CAP**
   - **1st PILLAR**
     - Single Payment Scheme
     - Direct payments
     - Annual declaration
   - **2nd PILLAR**
     - Rural Development
     - Additional financing
     - 5 years commitment

2. **DG ENV**
   - Environment directives
     - Sludge
     - Nitrate
     - Habitat
     - Bird
     - An. ident.

3. **DG SANCO**
   - Animal health and Public Welfare health
     - Statutory Management Requirements
       - Good Agriculture and Environmental Conditions
         - Cross Compliance
           - Good Farming Practices
             - Farm Advisory Service
               - Eligibility Land use/ area checks
                 - Land Parcel Identification System
                   - Administrative management

Requirements for payments
Help to be compliant
CAP legislation (since 2000) requires:

- geo-referenced information,
- on-line
- supported by up-to-date national image datasets

- Council Reg. 1782/03, Art 20 requires GIS use from 1/1/2005; the Integrated Administration and Control System (IACS).
Reference parcel (Administration)  
Reference parcel (Farmers)

In IACS-GIS  
Land Parcel Identification System

- Stable over time
- Boundary stored in GIS
- Use eligibility recorded officially
- Has unique identifier
- Prevents Double Declaration
- Locates land
- Area officially known
- Acts as reference frame for Aid application

Area claimed by farmer
- “Contracted” area in application
- Location in aid application
- May be unstable over time
- Controlled object
- Payment calculation

Area officially known
- Use declared by farmer

- 1.02ha
- 987xyz 1.23 ha
Digital Land Parcel System (LPIS)

SIGPAC
Spanish LPIS
Access via Web

900,000 Farmers

70 millions ‘recintos’
(reference parcel)

90 millions reference parcel in EU27

- A key element of the IACS systems
- Improve the sustainable management of the CAP
- Efficient support to farmer and Administration
Subsidies checks with Remote Sensing (CwRS)

CwRS = 70% of total On-The-Spot checks (600.000 in 2009; EU27)

Nb: OTS checks → > 5% of total farmers’ claims

Focus today is on image products with < 1m GSD
≈ 1:10,000 mapping scale

1.6 ha parcel declared as pasture…
Subsidies checks on the field

Measuring fields
→ Certification procedures
   (legal requirement)
GAEC STANDARD:

Maintenance of terraces, Keeping their drainage capacity, avoid risk of erosion

[Ref. Sardon, MARS PAC Annual Conf. 2007]
GAEC Standard:
Retention of landscape features (hedges, pond, trees in line, in group or isolated


The more we go the more we need accurate exhaustive view
What’s for the future?

Detailed characterization of rural landscapes (Managed through LPIS)

Landscape features (location, type)
- Hedgerow
- Group of trees
- Isolated trees
- Pond
- Ancient monument
  …

Land use / land cover
- Arable land
- Pasture
- Forest
- Permanent crop
  …

Eligibility of land
- 100% eligible
What’s for the future?

LPIS + Satellite imagery + additional GIS layers (Digital Elevation Model, …)

Location of: Parcels in vulnerable zones, rivers and green cover buffer, features ..

Provide relevant information to farmers (digital, paper)
Increase awareness on Cross Compliance (Advice: FAS)
Reduce risk of infringements

→ Sound management of rural areas (LPIS as cornerstone)
Management of Co-existence (GMO – non-GMO)

GMO maize field

Minimum buffer distance from GMO field

Maize field not authorized
Locate buffer strips to protect water bodies

The more informed is the farmer, the less infringements are expected
Other further development

Full record keeping of farm activities
→ IACS/LPIS as background

→ Full geo-traceability of food at farm gate
→ Farm Certification (Low carbon farming practice …)
Last comments

MARS Website
http://mars.jrc.ec.europa.eu

WORKSHOP: APLICACIÓN EN LA UNIÓN EUROPEA DE LOS SERVICIOS DE ASESORAMIENTO: EXPERIENCIAS Y PERSPECTIVAS DE FUTURO

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