



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE AGRICULTURA, PESCA  
Y ALIMENTACIÓN

SECRETARÍA GENERAL  
DE AGRICULTURA  
Y ALIMENTACIÓN

FONDO ESPAÑOL  
DE GARANTÍA AGRARIA O.A.

# Identifying, Preventing and Prosecuting Fraud and Irregularities in the Agricultural Sector: the Role of High-Tech and Remote Sensing Technologies

## Spanish approach

International Conference - Standing Up To State Capture: Innovative Methods to Investigate Fraud and Corruption in EU Funding For Agriculture  
14 September 2018



Spanish Agricultural  
Guarantee Fund

FEQA

Fondo Español de Garantía Agraria



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE AGRICULTURA Y PESCA,  
ALIMENTACIÓN Y MEDIO AMBIENTE

SECRETARÍA GENERAL  
DE AGRICULTURA  
Y ALIMENTACIÓN  
FONDO ESPAÑOL  
DE GARANTÍA AGRARIA

First of all...

**SPAIN IS DIFFERENT**



**WHY?**

F  
E  
S  
A



# Spanish administrative structure



Spain is a **decentralised** country, with a clear distinction between regional and central competencies.

**Autonomous Communities** have plenty competencies to implement the Common Agriculture Policy in their territories.

The **Member States** has competencies to establish basic common rules, in the frame of the general economic policy.

## 17 Autonomous Communities



Where a Member State accredits more than one paying agency, must also designate a single coordinating body with the following tasks:

- ❑ collecting and sending the information to be made available to the Commission;
- ❑ promoting harmonised application of the Community rules.
- ❑ coordinating anti-fraud prevention and fight with other PA´s and external bodys.

This role in Spain is played by the Spanish Agriculture Guarantee Fund (SAGF). In spanish, we are called FEGA (Fondo Español de Garantía Agraria).

F

E

G

A



# Facts: Fraud likelihood

F  
E  
S  
A



A Area Direct payments:  
IACS/ LPIS

EAFRD: Investments  
Proyected



# LPIS in Spain: Geographic Information System

Information System capable of integrating, storing, editing, analysing and showing geographical information, associated to a territory, crossing maps with databases

F  
E  
S  
A





# CAP Spanish LPIS

- **The CAP Spanish LPIS (called SIGPAC)** is the main tool for the spanish ACP management

F  
E  
G  
A

- **SIGPAC goals:**

- Identifying parcels and lands for the payments.
- Help farmers in claim submitting
- Ease administrative controls for government

- This systems covers the whole national territory (506.000 km<sup>2</sup>)



# SIGPAC basics

**LPIS: Geo-tagged graphic elements, associated to alphanumerical data**

**GRAPHIC INFORMATION:**  
Ground traits

**ALPHANUMERICAL INFORMATION:**  
Spatial elements factors

**IMAGES**

**CARTOGRAPHY**



**SPACIAL DATABASE:**

**Including graphic and alphanumerical related information**

F  
E  
S  
A



## Checks by monitoring: the model

LPIS of good quality  
GSAA in place  
Effective retro-active recoveries

Checks by monitoring  
(substituting OTSC)

*Assurance on the size of the land  
to be paid*

*Assurance on activities on  
claimed land*

- Focus on prevention (alerts to farmers)
  - Increased compliance
- Reduction of inspections in the field (in most cases no visits to the field necessary)
- Increase in efficiency of controls due to the automated nature of the approach

F  
E  
G  
A





# Traditional controls vs monitoring controls

- Different approach
- Traditional controls :
  - It looks for error detection in the beneficiary's claims → Outcome: penalties or reductions
  - Too focused on finding small non-admissible lands, with low- economic impact
  - Sample selection is complex for the PA's: high cost in time and resources.
  - CB's controls and auditing work is carried out later
- Monitoring controls:
  - Preventing and continuing approach: Early Alarm-system to avoid error. Farmers are helped to make proper claims for the aid schemes, or even not submit them (claimless system).
  - No sample selection . No measuring. No tolerance. No Field-checks.

**PREVENTION IS THE BEST TOOL FOR ANY  
ANTI-FRAUD SYSTEM**

F  
E  
G  
A



# Regulation(EU) nº 2018/746

- It allows Member States to carry out checks by monitoring.  
They shall set up a procedure of regular and systematic observation, tracking and assessment of all eligibility criteria, commitments and other obligations which can be monitored by **Copernicus Sentinels satellite data** or other data with at least equivalent value.
- All eligibility criteria, commitments and other obligations for which Sentinels satellite data and/or other data with at least equivalent value provide information that is relevant to conclude on the eligibility of the aid or support requested, regardless of specific cases where the information does not provide conclusive results because of e.g. the size/shape of parcels or absence of technical solutions developed to process/assess data, are considered as monitorable.

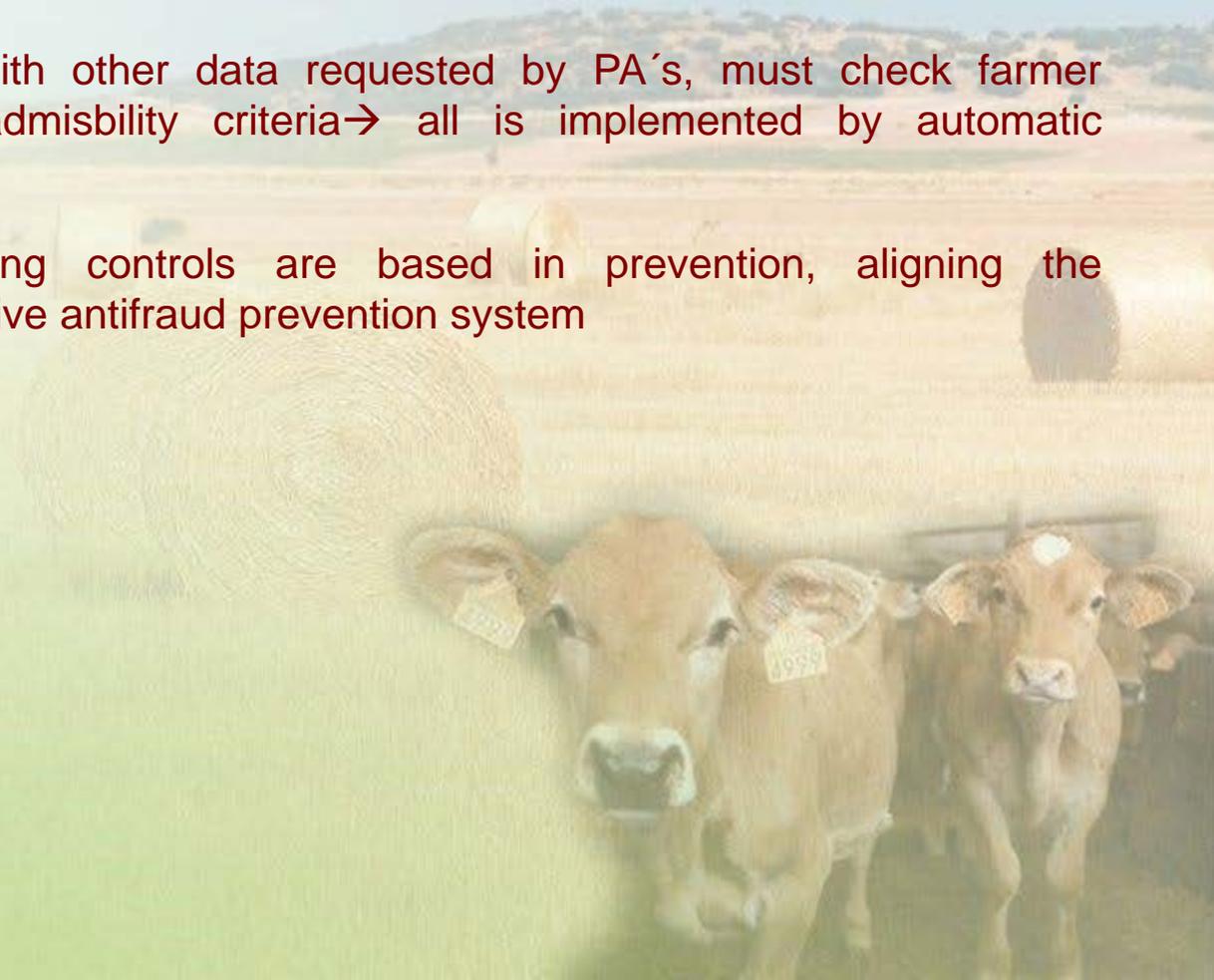
F  
E  
G  
A



# Monitoring basics

- LAND PARCELS ACTIVITY CHECKING
- Sentinel Images, along with other data requested by PA's, must check farmer activities, according to admisibility criteria → all is implemented by automatic procedures
- More important, monitoring controls are based in prevention, aligning the management with an effective antifraud prevention system

F  
E  
G  
A





# Using LPIS in antifraud prevention and fight (I)

## Checking admissibility, e.g. EAFRD IACS Ecological Agriculture

- Minimum farming area required to access the aid scheme
- Checking the right crops in the land

### DATOS SIGPAC

Provincia	SIGPAC	Municipio	Agr-Pol	Parcz:Zona:Rec	Uso	S.Sigpac (ha)
JÁEN	23075	SABOTE	900-012	00188-00001	OV	11,71

### DATOS COMPROBADOS

Parcz:Zona:Rec	Subrec	Uso comprobado	S. Med (ha)	Fecha	Observaciones
00188-00001	B	IMPRODUCTIVOS PERMANENTES	0,00		B > F1 antigua
	A	OLIVAR	11,69		
<b>Total:</b>			<b>11,72</b>		

Imagen: BAEZ\_050\_2011\_SIGPAC\_V5\_R10



Escala 1: 7000



### Datos Identificativos SIGPAC 2014

Provincia	23 - Jaén
Municipio	75 - Sabote
Pulgona	12
Parcela	186



Escala 1: 2500



F  
E  
S  
A



# Using LPIS in antifraud prevention and fight (II)

## EAFRD IACS Mountain area vs Non-mountain area

F  
E  
S  
A

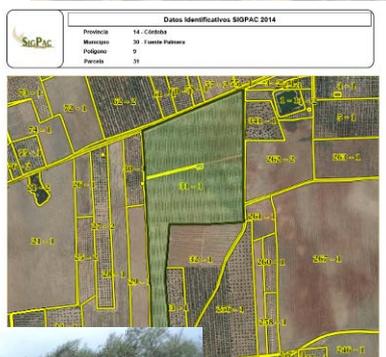


**DATOS SIGPAC**

Provincia	SIGPAC	Municipio	Agr-Pol	Parc:Zona:Rec	Uso	S.Sigpac (ha)
CORDOBA	14030	PUNTE REALERA	00-000	00031:00-000	OV	12,94

**DATOS COMPROBADOS**

Parc:Zona:Rec	Subrec	Uso comprobado	S. Med (ha)	Fecha	Observaciones
00031:00-000	-	OLIVAR	12,94		Contiene elementos estructurales
<b>Total:</b>			<b>12,94</b>		

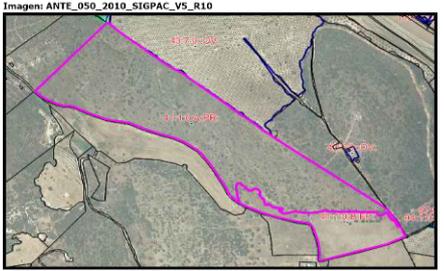


**DATOS SIGPAC**

Provincia	SIGPAC	Municipio	Agr-Pol	Parc:Zona:Rec	Uso	S.Sigpac (ha)
TRILLAGA	20015	ANTEQUERA	00-121	00041:00-000	FR	32,71

**DATOS COMPROBADOS**

Parc:Zona:Rec	Subrec	Uso comprobado	S. Med (ha)	Fecha	Observaciones
00041:00-000	A	PASTO ARBUSTIVO	27,28		A->FF Inequi, B-> Contiene elementos estructurales
	B	SUPERFICIE FORRAJERA	5,41		
<b>Total:</b>			<b>32,72</b>		





# Using LPIS in antifraud prevention and fight (III)

## EAGF IACS

Parcel use compatible with the aid claim

Establishing área / nº of Hectares

Crop- claimed and checked

F  
E  
G  
A

**DATOS SIGPAC**

Provincia	41001	Municipio	Ag. Pol.	Parcel/Zona/Doc.	Uso	S. Super. (ha)
	41001	Ecija	00000	000100001	10	2022

**DATOS COMPLEMENTARIOS**

Parcel/Zona/Doc	Subtr.	Uso compatible	S. Med (ha)	Fecha	Observaciones
000010001	A	AGRICULTA	18,83	10/09/2014	Alfalfa SIGPAC anterior a 2014
B	IMPEDICIONES PERMANENTES	0,00			Parcela SIGPAC anterior a 2014
C	IMPEDICIONES PERMANENTES	0,00			Parcela SIGPAC anterior a 2014
D	IMPEDICIONES PERMANENTES	0,00			Parcela SIGPAC anterior a 2014
E	IMPEDICIONES PERMANENTES	0,00			Parcela SIGPAC anterior a 2014
F	AGRIPECOS	0,00			
G	POSTO ABANDONADO	0,00			
H	VIAS	18,83			
<b>Total</b>			<b>18,83</b>		

Imagen: EC13\_050\_2010-2011\_SIGPAC\_VS\_R10

**Datos Identificativos SIGPAC 2014**

Provincia 41 - Sevilla  
Municipio 39 - Ecija  
Poligono 62  
Parcela 1



**Datos Identificativos SIGPAC 2014**

Provincia 41 - Sevilla  
Municipio 39 - Ecija  
Poligono 62  
Parcela 1

**Información Alfanumérica SIGPAC asociada a la parcela**

Recibo	Uso	Superficie (ha.)	Perímetro (m)	Parcela Media (%)	Cof. de Regado (%)	Coeficiente de Admisibilidad de Pastos		Incidencias
						% Superficie (ha.)	Porcentaje de Equivalencia (%)	
6	AD	0,1055	392,89	0,89	---	---	---	202
7	AD	0,0259	8,254,71	0,82	---	---	---	202
8	PD	0,1052	392,89	0,945	---	---	---	202
10	TA	99,4883	4.783,20	0,49	0,30	---	---	12.202,301.402
11	TA	59,2363	2.228,41	1,86	100,00	---	---	12.14.115.202.108.498.062.700
13	IM	2,0794	465,88	2,29	---	---	---	202.062
13	TA	99,9897	2.291,01	1,87	100,00	---	---	12.14.115.202.390.480.700
14	IM	0,4000	8,758,75	1,96	---	---	---	202.062
<b>Superficie total (ha.)</b>		<b>120,1315</b>						
<b>Superficie total (ha.)</b>								

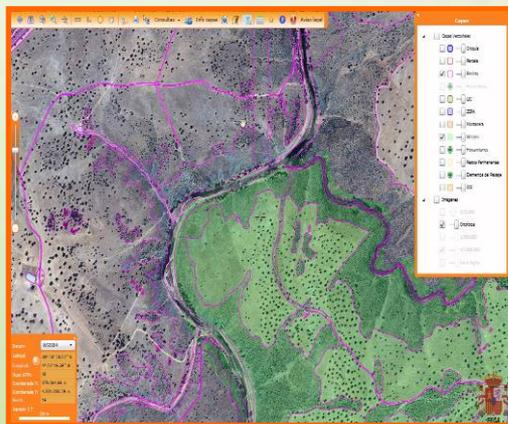
**Descripción de Incidencias**

# Using LPIS in antifraud prevention and fight (IV)

## Checking requirements for Conditionality

The SIGPAC provides, using different layers of information, the main characteristics of the farm, the crops, the land, etc.

It makes possible to check every requirement about conditionality (size, use...)



### ÁMBITO DE MEDIO AMBIENTE, CAMBIO CLIMÁTICO Y BUENA CONDICIÓN AGRÍCOLA DE LA TIERRA

**REQUISITO LEGAL DE GESTIÓN 1.** Directiva 91/676/CEE del Consejo de 12 de diciembre de 1991 sobre protección de las aguas contra la contaminación producida por nitratos procedentes de fuentes agrarias.

**Artículos 4 y 5:** Cumplimiento de las medidas establecidas en los programas de actuación, en las explotaciones agrícolas y ganaderas situadas en zonas declaradas por la Comunidad Autónoma como zonas vulnerables. Aplicable en Zonas Vulnerables (identificadas mediante la incidencia 202 en el SIGPAC).

Los agricultores deben disponer de registros de los 4 últimos años (2012 a 2015), de fertilización (anual) y/o fertirrigación (mensual) nitrogenada para cada uno de los cultivos que se llevan a cabo, fechas en las que se aplican los fertilizantes, superficie cultivada, tipo de abono, número de albarán, composición del abono y riqueza en nitrógeno, y cantidad de fertilizante aplicado (Kg/ha), aún aunque no se apliquen fertilizantes, y en caso de explotaciones ganaderas intensivas, hoja de utilización estiércoles y purines, correctamente cumplimentados. Además, se deben conservar, junto con los citados registros, las facturas/ albaranes de los fertilizantes nitrogenados utilizados.

Tras la presentación de dicha documentación, se verificará el cumplimiento de los requisitos 3, 4, 5 y 6 del mismo ámbito.



# Main concepts

High-Tech and Remote Sensing Technologies are extremely useful in any anti-fraud fight and prevention system

Usually these tools are used in IACS populations, where the fraud probability is low.

Points to be considered:

- Usable by auditors
- Information available in a quick and efficient way
- Easy sample selection in any antifraud control
- No need for field trips
- Allows crossing information with databases
- ...BUT...STILL ON PROCCES...

F  
E  
G  
A



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE AGRICULTURA, PESCA  
Y ALIMENTACIÓN

SECRETARÍA GENERAL  
DE AGRICULTURA  
Y ALIMENTACIÓN

FONDO ESPAÑOL  
DE GARANTÍA AGRARIA O.A.

Thank you for listening - and  
for your participation 😊.

Sergio Gomez de Rozas

Internal Audit Unit  
Spanish Agricultural Guarantee Fund  
E-mail: [sgomezro@fega.es](mailto:sgomezro@fega.es)

