

# RENTING PRICES AND VALUATION SYSTEM

OF THE PLOTS BELONGING TO  
**LAND BANK OF GALICIA**  
*(a methodological approach)*

2nd International Workshop on Land Consolidation and Land Banking  
FAO of United Nations / Farland "futures approaches to land development"  
LANDNET

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## SCOPE

- High degree of land abandonment in some districts and very high demand of land by agricultural proposes in others.
- Inexistence of renting market in the most districts of Galicia.
- Very high prices of the land and very low mobility.

## OBJECTIVES

- To determine a renting prices, at local level, useful as maximum reference prices by the transactions do thought the land bank of Galicia.
- To determine the value of plots which ownership belong to land bank of Galicia.

## PREMISAS (legislative / technical)

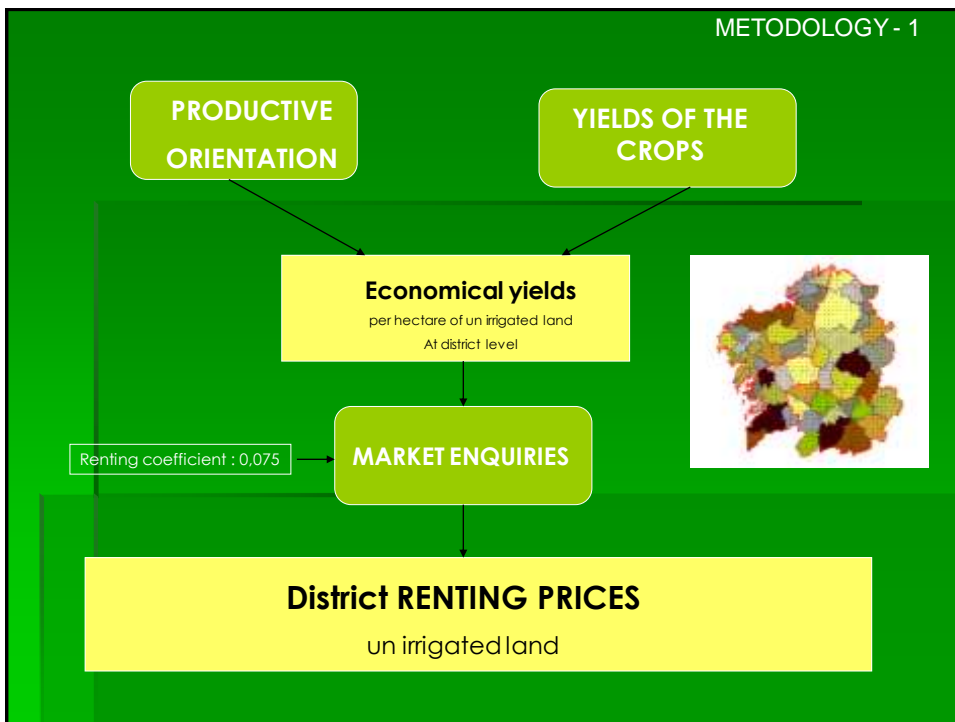
- The prices and values must be determined mainly taken into the account the agricultural benefits.
- The prices must take into consideration the actual productive orientation of the districts.
- The renting prices must be a percentage of the agricultural activity.
- The prices must take into account the market.

## **PREMISAS (legislative / technical)**

The value obtained through agricultural benefits **can be affected** by objective values related to the parcel situation as:

- Accessibility to settlements or economical activity centres.
- Singular environment and landscape zones.
- Singularities of the plots.

## **METODOLOGICAL DEVELOPMENT**



**PRODUCTIVE ORIENTATION**

**WERE DEFINED 5 PRODUCTIVE ORIENTATIONS :**

- 1.- Folder crops and meadows: corn, meadows, ...
- 2.- Horticultural crops: green bean, pepper, cabbage, ...
- 3.- Tubercles: potato
- 4.- Grain cereals: wheat, barley, grain corn, ...
- 5.- Woody crops: wine yard, apple trees, kiwi trees, ...

**THE UNIRRIGATED LAND OF THE DISTRICTS WAS DISCRIBED IN  
FUNCION OF THE OCUPATION RATE OF THIS 5 PRODUCTIVE  
ORIENTATIONS**

$$\text{unirrigated land}_{(\text{district})} = f \left( \begin{array}{l} \% \text{ folder crops, \% horticultural crops, \% tubercles, \% grain cereals,} \\ \% \text{ wooded crops} \end{array} \right)$$

YIELD  
OF THE CROPS

Based on agronomic data sources (production costs and input and output prices) we calculate economical reference yields by Galicia of the main crops of the all different productive orientations defined :

Folder crops	...	Corn	...	1.119 €/ha
Tubercles	...	Potato	...	3.505 €/ha
Horticultural crops	...	Green beans	...	8.426 €/ha
Grain cereals	...	Wheat	...	412 €/ha
Woody crops	...	Vineyard	...	4.500 €/ha

DISTRICT YIELDS  
(euros/ha UNIRRIGATED LAND)

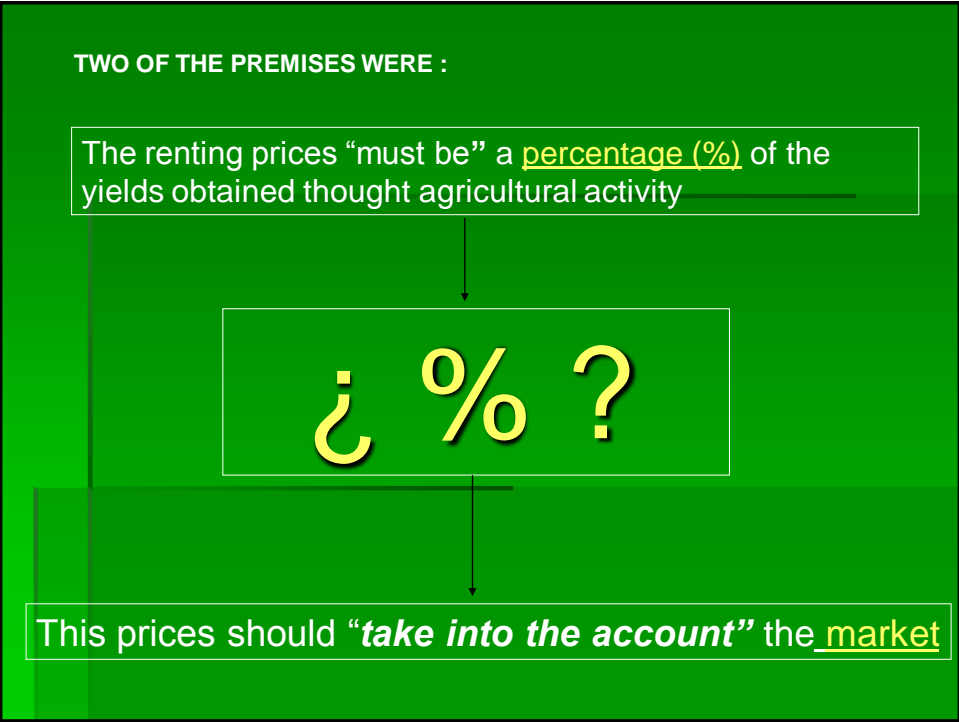
To determine the net yields of un irrigated land at district level the procedure was as follows :

Productive orientations	Reference crops	Yields (€ / ha)
x: % Folder crops	corn	1.119
y: % Tubercles	potato	3.505
z: % Grain cereals	wheat	412
t: % Horticultural crops	green beans/cabbage	8.426
w: % Vineyards	vineyard	4.500

Net Annual Yield of un irrigated land at district level :

$( (1.119 * x) + (3.505 * y) + (412 * z) + (8.426 * t) + (4.500 * w) )$

TIPIFICACIÓN EN FUNCIÓN DOS RENDIMIENTOS NETOS SEGÚN LA ORIENTACIÓN PRODUCTIVA		DISTRICT YIELDS (euros/ha un irrigated land)		
	SAU secoño	variability		
A BARCALA	2.623	O Salnés	Baixa Limia	19%
A CORUNA	2.720			
ARZUA	2.535	2957	2485	
BARBANZA	2.621			
BERGANTINOS	2.689			
BETANZOS	2.884			
EUME	2.835			
FERROL	2.774			
FISTERRA	2.623			
MUROS	2.674			
NOIA	2.714			
O SAR	2.705			
ORDES	2.611			
ORTIGAL	2.901			
SANTIAGO	2.722			
TERRA DE MELIDE	2.623			
TERRA DE SONEIRA	2.670			
XALLAS	2.611			
A FONSAGRADA	2.641			
A MARINA CENTRAL	2.884			
A MARINA OCCIDENTAL	2.918			
A MARINA ORIENTAL	2.935			
A ULLOA	2.740			
CHANTADA	2.774			
LUGO	2.606			
MEIRA	2.618			
OS ANCARES	2.654			
QUIROGA	2.904			
SARRIA	2.658			
TERRA CHA	2.623			
TERRA DE LEMOS	2.802			
ALLARIZ-MACEDA	2.581			
A LIMIA	2.713			
BAIXA LIMIA	2.485			
O CARBALLINO	2.838			
O RIBEIRO	2.894			
OURENSE	2.911			
TERRA DE CALDELAS	2.867			
TERRA DE CELANOVA	2.744			
TERRA DE TRIVES	2.614			
VALDECORRAS	2.838			
VERIN	2.915			
VIANA	2.602			
A PARADANTA	2.774			
CALDAS	2.806			
DEZA	2.670			
O SALNÉS	2.957			
O MORRAZO	2.829			
O CONDADO	2.843			
O BAIXO MINO	2.882			
PONTEVEDRA	2.808			
TABEIRÓS-TERRA DE MONTES	2.871			
VIGO	2.838			



RESULT : Galician average by un irrigated land

213 euro/hectare

MARKET ENQUIRES

ENQUISA SOBRE OS PREZOS DE VENDA E ALUGUER DE PREDIOS RÚSTICOS EN GALIZA

INFORMANTE

NOME

DATA

D.N.I.

TELÉFONO

ENDEREZO

PROFESION

EMPRESA/ ORGANISMO

Nº

NIVEL DE DESAGREGACIÓN

TIPUS DE ZONAS

PARROQUIA

MUNICIPIO

COMARCA

APTITUDE DA TERRA

TIPIFICACIÓN DO A

OFERTA

TIPIFICACIÓN DA APTITUDE DA TERRA

SAU

SAUs

U

PA

TIPIFICACIÓN DO ALUGUER OPERATIVO

SAU

SAUs

U

PA

2.200 ENQUIRES

CRITERIA / THRESHOLD

( average yield of Galicia ) x ( % )

must be :

<

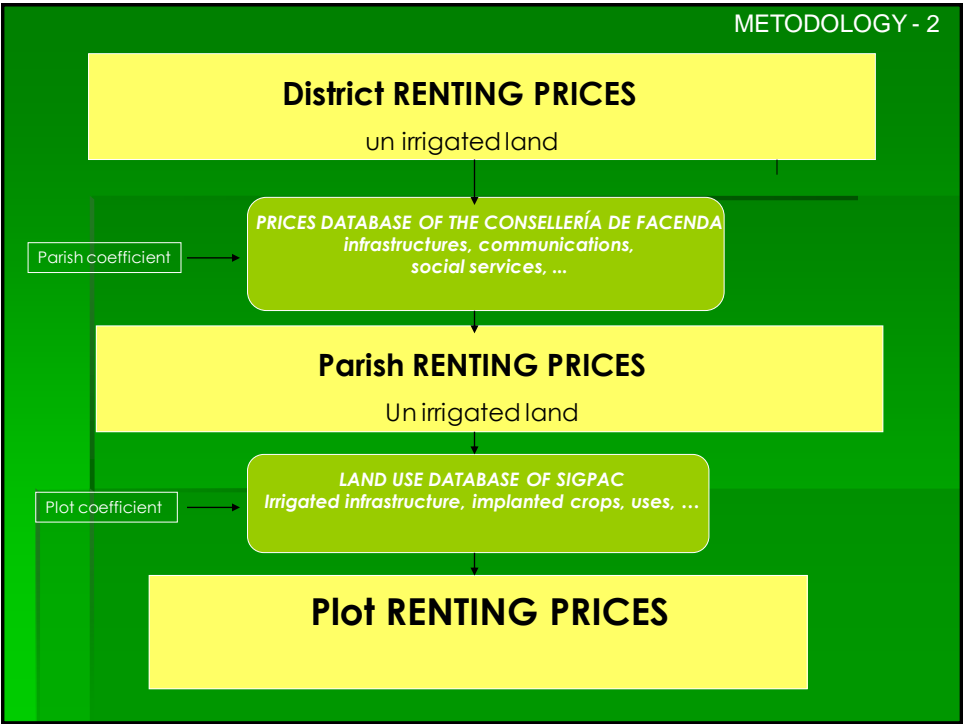
213 euro / hectare  
(market average of Galicia)

7,5 %

By this way were determined the district prices which are shown on the 7.5% path.  
This 7.5% is the rate which do the average by GALICIA be, 206 euros/ha, just minor than the average obtained thought market enquires, 213 euros/ha.

186 < x < 222		TIPIFICACIÓN EN FUNCIÓN DOS RENDIMIENTOS NETOS SEGUNDO LA ORIENTACIÓN PRODUCTIVA		PREZOS DE CESIÓN BASE					
19%		SAU secoiro		SAUs Rendemento *		SAUs Rendemento *		SAUs Rendemento *	
				6%		7%		8%	
				Rendemento *		Rendemento *		Rendemento *	
A BARCALA		2.623	167	170	184	197	210	223	
A CEBRINA		2.720	163	177	189	204	218	231	
ARZUA		2.535	162	165	177	190	203	216	
BARRANZA		2.621	167	170	183	197	210	223	
BERGANTINOS		2.689	161	175	188	202	216	230	
BETANZOS		2.884	173	187	202	216	231	245	
BUME		2.835	170	184	198	213	227	241	
FERROL		2.774	166	180	194	208	222	236	
FIESTERRA		2.623	167	170	184	197	210	223	
MUROS		2.674	160	174	187	201	214	227	
NOJA		2.714	163	176	189	204	217	231	
O SAR		2.705	162	176	189	203	216	230	
ORDES		2.611	167	170	183	196	209	222	
ORTEGAL		2.901	174	189	203	218	232	247	
SANTIAGO		2.722	163	177	191	204	218	231	
TERRA DE MELIDE		2.623	167	170	184	197	210	223	
TERRA DE SONEIRA		2.670	160	174	187	200	214	227	
XALLAS		2.611	167	170	183	196	209	222	
A FORSAGRADA		2.641	168	172	185	198	211	224	
A MARINA CENTRAL		2.884	173	187	202	216	231	246	
A MARINA OCCIDENTAL		2.918	175	190	204	219	233	248	
A MARINA ORIENTAL		2.935	176	191	205	220	235	249	
A ULLOA		2.740	164	178	192	205	219	233	
CHANZADA		2.774	166	180	194	208	222	236	
LUCÍS		2.606	166	169	182	195	208	221	
MEIRA		2.618	167	170	183	196	209	222	
OS ANCARES		2.654	169	172	186	199	212	226	
QUIROGA		2.904	174	189	203	218	232	247	
SARRIA		2.668	169	173	186	199	213	226	
TERRA CHA		2.623	167	170	184	197	210	223	
TERRA DE LEMOS		2.802	168	182	196	210	224	238	
ALLARIZ MACEDA		2.581	165	168	181	194	207	219	
A LIMA		2.713	163	176	190	203	217	231	
BAIXA LIMA		2.485	149	162	174	186	199	211	
O LABALLINO		2.638	170	183	197	213	227	241	
O RIBEIRO		2.884	174	188	203	217	232	246	
OURENSE		2.911	175	189	204	218	233	247	
TERRA DE CALDELAS		2.967	172	186	201	215	229	244	
TERRA DE CELANOVA		2.744	165	178	192	206	220	233	
TERRA DE TRIVES		2.614	167	170	183	196	209	222	
VALDEORRAS		2.538	170	184	199	213	227	241	
VERÍN		2.915	176	189	204	219	233	248	
VIANA		2.602	166	169	182	195	208	221	
A PARADANTA		2.774	166	180	194	208	222	236	
CALDAS		2.806	168	182	196	210	224	239	
OZA		2.670	160	174	187	200	214	227	
O SALNES		2.957	177	192	207	222	237	251	
O MONRAZO		2.829	170	184	198	212	226	241	
O CONDADO		2.843	171	185	199	213	227	242	
O BAIÑO MIÑO		2.882	172	186	200	214	228	242	
PONTEVEDRA		2.808	169	183	197	211	225	239	
TABOIRAS-TERRA DE MONTES		2.671	164	187	199	213	226	239	
VIGO		2.638	170	184	199	213	227	241	
MEDIA			164	178	192	206	219	233	

METODOLOGY - 2





## PARISH VARIABILITY

INFRASTRUCTURES, COMMUNICATIONS,  
SOCIAL SERVICES, ...

The approach to this variability was done through market prices data base used by **Consellería de Economía e Facenda**, obtaining :

### PARISH COEFFICIENTS

- With the aim to distinguish each parish to the others of this district,
- Delimiting its weight at 20%, 0,8 - 1,2
- The parish with higher value in a district have a price 20% higher than the renting of the district, and the lower until 20% less,

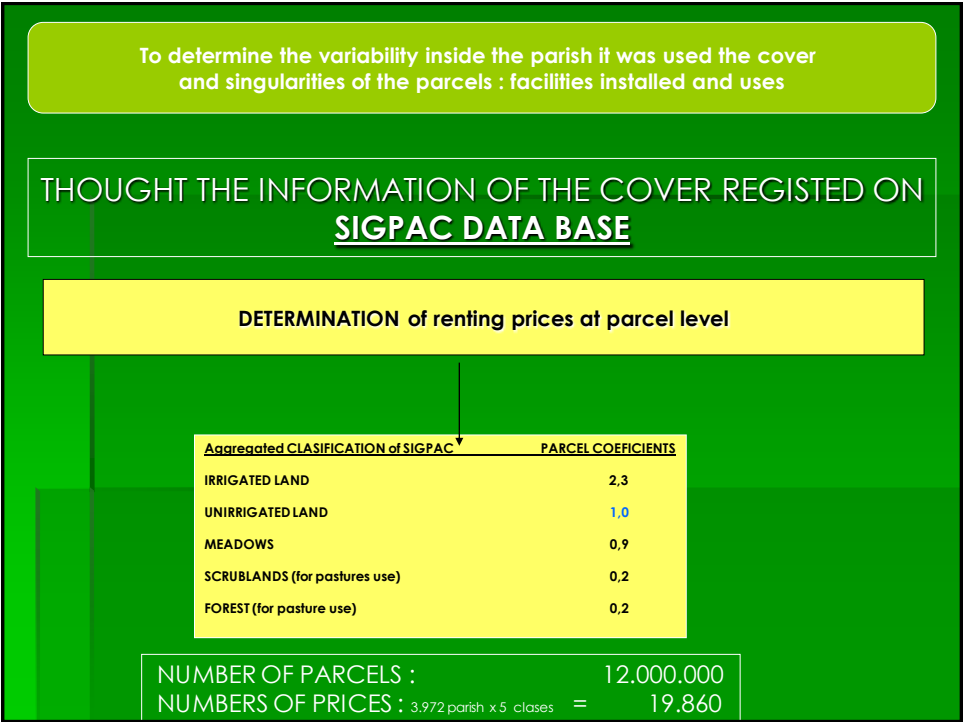
## Determination of Parish RENTING PRICES un irrigated land

### CRITERIA

**DISTRICT RENTING PRICE**  
X  
**PARISH COEFFICIENT**

	O Salnés	Baixa Limia	
rendimiento medio comarcal	2957	2485	
precio medio SAUs comarcal (7,5%)	222	186	19%
parroquia mejor (+20%)	266	224	
parroquia peor (-20%)	177	149	78%


Districts: 54  
Parish: 3.972



TOTAL VARIABILITY

	O Salnés	Baixa Limia	
rendimiento medio comarcal	2.957	2.485	
precio medio SAUs comarcal (7,5%)	222	186	19%
parroquia mejor (+20%)	266	224	
parroquia peor (-20%)	177	149	78%
Parroquia mejor de O Salnés			
labradío regadío ( x 2,3)	612		
forestal- pastizal (x 0,2)	53		
Parroquia peor de Baixa Limia			
labradío regadío ( x 2,3)	343		
forestal- pastizal (x 0,2)	30		

1953%



## Parcel RENTING PRICES

$$\sum_{n=0}^N \frac{\text{ANUAL YIELD (RPp/0,075)}}{(1+i)^n} \times Ea \text{ (agronomic situation coefficient)}$$

**VALUE**  
at parcel level

To determine the plot value it was taken into the account as start point :

### THE RENTING PRICES

determined which were divided by 0,075 to calculate the AGRICULTURAL YIELD of the plot.

By the capitalization of this annual yields were used as discount rate :

*The last published reference by the Banco de España in the year immediately before to the value estimation, of the Spanish public debt in secondary markets to three years, increasing in two perceptual points.*

The valuation should take into account the conditions of the plot in the valuation time.

For this reason, unless there exist any other justified singularity will be consider a condition coefficient at plot level.

$$\text{VALUE of the plot} = \sum_{n=0}^N \frac{RPp/0,075}{(1+i)^n} \times Ea$$

**N :** capitalization period (IN PERPETUITY)

**RPp :** renting price of the plot

**Potential yield :**  $RPp / 0,075$

**i :** discount rate

**Ea :** agronomic condition coefficient

optimum Ea = 1,00    media Ea = 0,80

normal Ea = 0,90    low Ea = 0,70

# VARIABILITY

		tasa 7,5%	COEFICIENTE DE ESTADO AGRONÓMICO	
			0,6	1
	PA p / coef. de arrendamiento	RENDIMIENTO	VALOR	
labradio r. mejor p. de O Salnés	(612 / 0,075)	8.160	65.280	108.800
pastizal peor p. de Baixa Limia	(30 / 0,075)	400	3.200	5.333
		tasa 5%	COEFICIENTE DE ESTADO AGRONÓMICO	
			0,6	1
	PAp / coef. de arrendamiento	RENDIMIENTO	VALOR	
labradio r. mejor p. de O Salnés	(612 / 0,075)	8.160	97.920	163.200
pastizal peor p. de Baixa Limia	(30 / 0,075)	400	4.800	8.000



Nº	CLAVE	CLASIFICACIÓN AGRONÓMICA	PREZO TIPO DE ARRENDAMIENTO ANUAL
1	H	HORTA	505 euros/hectárea
2	Vi p	VIÑEDO PREFERENTE	606 euros/hectárea
3	Vi np	VIÑEDO NON PREFERENTE	303 euros/hectárea
4	Fr	FROITEIRAS	222 euros/hectárea
5	Lb R	LABRADÍO REGADÍO	465 euros/hectárea
6	Lb S	LABRADÍO SECAÑO	202 euros/hectárea
7	Pr	PRADOS E PRADEIRAS	182 euros/hectárea
8	Past	PASTEIRO	40 euros/hectárea
9	F	FORESTAL (pasto baixo cuberta)	40 euros/hectárea
10	Imp	IMPRODUTIVO	20 euros/hectárea

## Reference information

- **Superficies y rendimientos agronómicos de los cultivos**  
(Fuente: Anuario de Estadística Agraria)
- **Precios de las producciones**  
(Fuente: Anuario de Estadística Agraria)
- **Costes de producción de los cultivos**  
(Fuente: Centro de Investigaciones Agrarias de Mabegondo)
- **Mapa de Coberturas y Usos del Suelo**  
(Fuente: SITGA, sistema de información territorial de Galicia)
- **Encuesta del mercado de arrendamiento**  
(Fuente: Consellería do Medio Rural)
- **Encuesta de cánones de arrendamientos rústicos**  
(Fuente: Ministerio de Agricultura, Pesca y Alimentación)
- **Precios de la tierra**  
(Fuente: Consellería de Economía e Facenda)
- **Sigpac**  
(Fuente: Ministerio de Agricultura, Pesca y Alimentación)

THANK YOU FOR ATTENCION

