SPAIN / ACEFER

October 2011

SPAIN/ACEFER

- Spain
- Spanish agriculture
  - General Information (1)(2)
  - Main crops (3)
  - Irrigation (4)
  - Income (5)(6)

  - Spanish fertilizer market
  - Consumption (000 MT nutrients 1945-2010) (7)
  - Consumption (000 MT nutrients 2009-2010) (8)
  - Consumption (000 MT nutrients 2005/2008-2009-2010) (9)
  - Production, imports, agricultural sales, exports (2009-2010) (10)
  - Nutrients and fertilizer consumption, period 2007/2011 (11)
  - 2010 Market situation & evolution (12)
  - Evolution of average dosis per nutrient (13)
  - Consumption N, P_2O_5 and K_2O by crops in Spain. Year 2006/2007 (14)
  - Spanish fertilizer industry chart (15)
  - Spanish fertilizer industry comments (16)
  - Spanish fertilizer distribution (17)
  - Spanish fertilizer market production/import (18)
  - Spanish fertilizer market logistics (19)
  - Seasonality of application (20)

SPAIN

- 504.740 square kilometers
- 46.745.807 population (census 2009)
- GDP per capita (2009) 23.874 €
  (3 % above EU 27 average)

SPANISH AGRICULTURE (1)

- In 2005-2008 Spanish Agriculture was the 13,2 % of European Agricultural Production (UE of 18 members).

- Total agricultural surface: 17.396.953 has. (35% of total surface), of which 3.407.953 has. under irrigation (19,6 %).

- Irrigation systems: traditional 30,6%, spray irrigation 21,6%, fertigation 47,8% and increasing every year (Spain is a leading country in fertigation use and technologies).

This is one of the reasons for the development of special liquid soluble fertilizers (specially liquid NPK´s , soluble fertilizers and acids).

2010 Data.

SPANISH AGRICULTURE (2)

- Arable land: 12.586.440 has of which 2.489.637 has under irrigation (20%)
- Difference between arable land and total agricultural surface is the land devoted to vineyard and fruit trees (citrus, other fruit trees and olive trees) where plants are lasting several years on land.
- Surface devoted to cereals: 6,003 MM (avge.2003-2009)
- Surface devoted to olive trees: 2,573 MM has, to fruit trees (including citrus): 1,459 MM has, to vineyard: 1,037 MM has (almost 5 MM has).

All these crops are the main areas for development of fertigation techniques.

- Total number of farms is above 1 million, of which 900.000 are smaller than 15 has.(550.000 smaller than 4 has.) but 24.500 farms take more than 60 % of the arable land. So property is very irregular.

SPANISH AGRICULTURE (3) (2010 Data)

MAIN CROPS

CROPS	ACREAGE (000 has.)	YIELD (Kg/ha)
Wheat	1.934	3.000
Barley	2.877	2.800
Other winter cereals	739	1.300
Corn	332	10.000
Rice	121	7.700
TOTAL CEREALS	**6.003**	**-**
Pulses	357	-
Potato	77	29.000
Cotton	63	2.200
Sugar beet	47	75.000
Sunflower	712	1.250
Forage crops (includes lucerne)	1.002	-
Vegetables	310	-
Fruit trees	455	-
Citrus trees	315	25.000
Almond trees	689	400
Vineyard	1.037	5.500
Olive trees	2.573	2.500

SPANISH AGRICULTURE (4)

IRRIGATION SYSTEMS PER MAIN CROPS (2010 Data)

CROPS	IRRIGATION SYSTEM			
	Total Surface (000 has.)	Innondation (000 has.)	Sprinkler Irrigation (000 has.)	Fertigation (000 has.)
Cereals	870	499	357	14
Olive trees	712	37	1	674
Citrus trees	291	63	-	228
Vineyard	342	9	14	319
Fruit trees	245	61	5	179
Vegetables	176	29	49	98
Others	772	346	309	117
TOTAL	**3.408**	**1.044**	**735**	**1.629**

SPANISH AGRICULTURE (5)

INCOME (MM EUROS)

AGRICULTURAL INCOME

	2010	2009	DIFFERENCE (%)		
			Quantity	Price	Value
AGRICULTURE	24.750	23.001	1,9	5,6	7,6
CATTLE BREEDING	12.666	12.967	0,4	-2,7	-2,3
SERVICES	413	421	-0,9	-1.,0	-1,9
OTHERS	1.203	1.204	0,1	-0,1	0,0
TOTAL	**39.032**	**37.593**	**1.3**	**2,5**	**3,8**

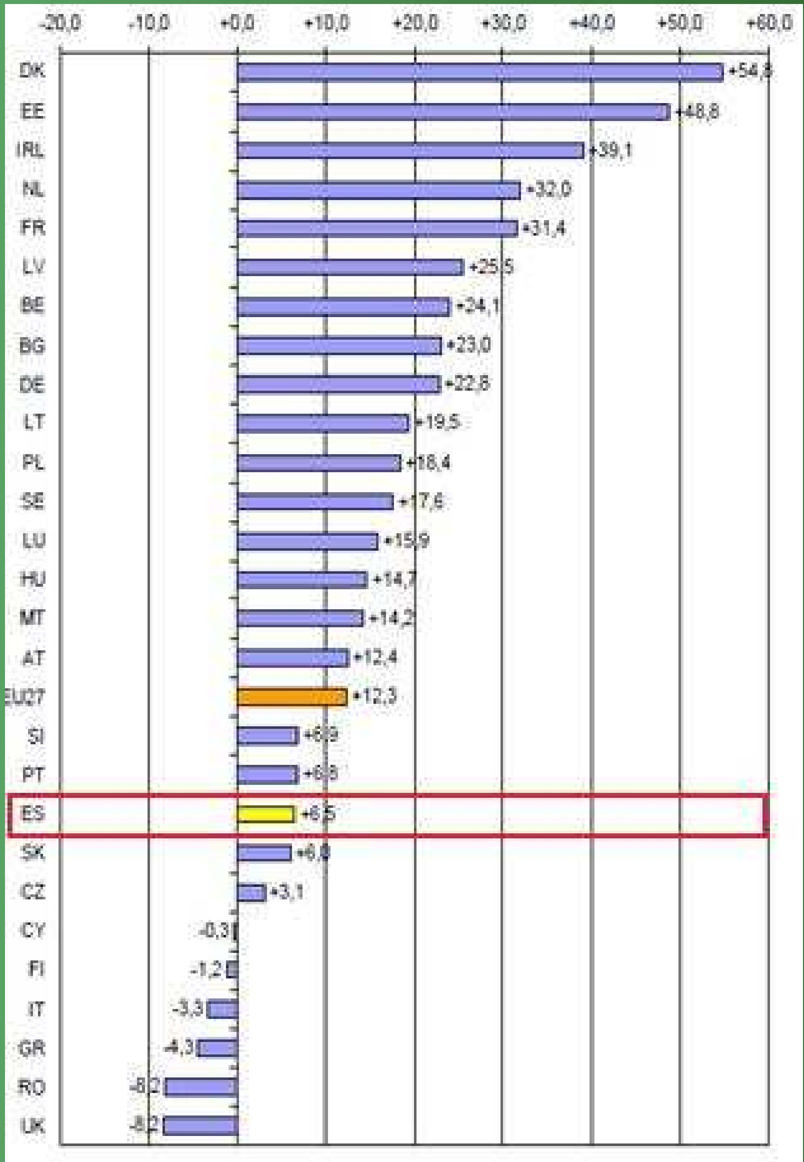
INPUTS

	2010	2009	DIFFERENCE (%)		
			Quantity	Price	Value
FERTILIZERS	1.500,0	1.240,3	42,0	-12,3	24,6
ENERGY	1.501,0	1.285,1	0,1	16,7	16,8
CATTLE FEEDING	7.668,8	7.420,7	0,4	2,9	3,3
OTHERS	11.346,1	11.484,5	-	-	-
TOTAL	**22.015,9**	**21.394,6**	**0,0**	**2,9**	**2,9**

FARMER´S INCOME	**22.931,9**	**21.448,7**	**-**	**-**	**6,9**

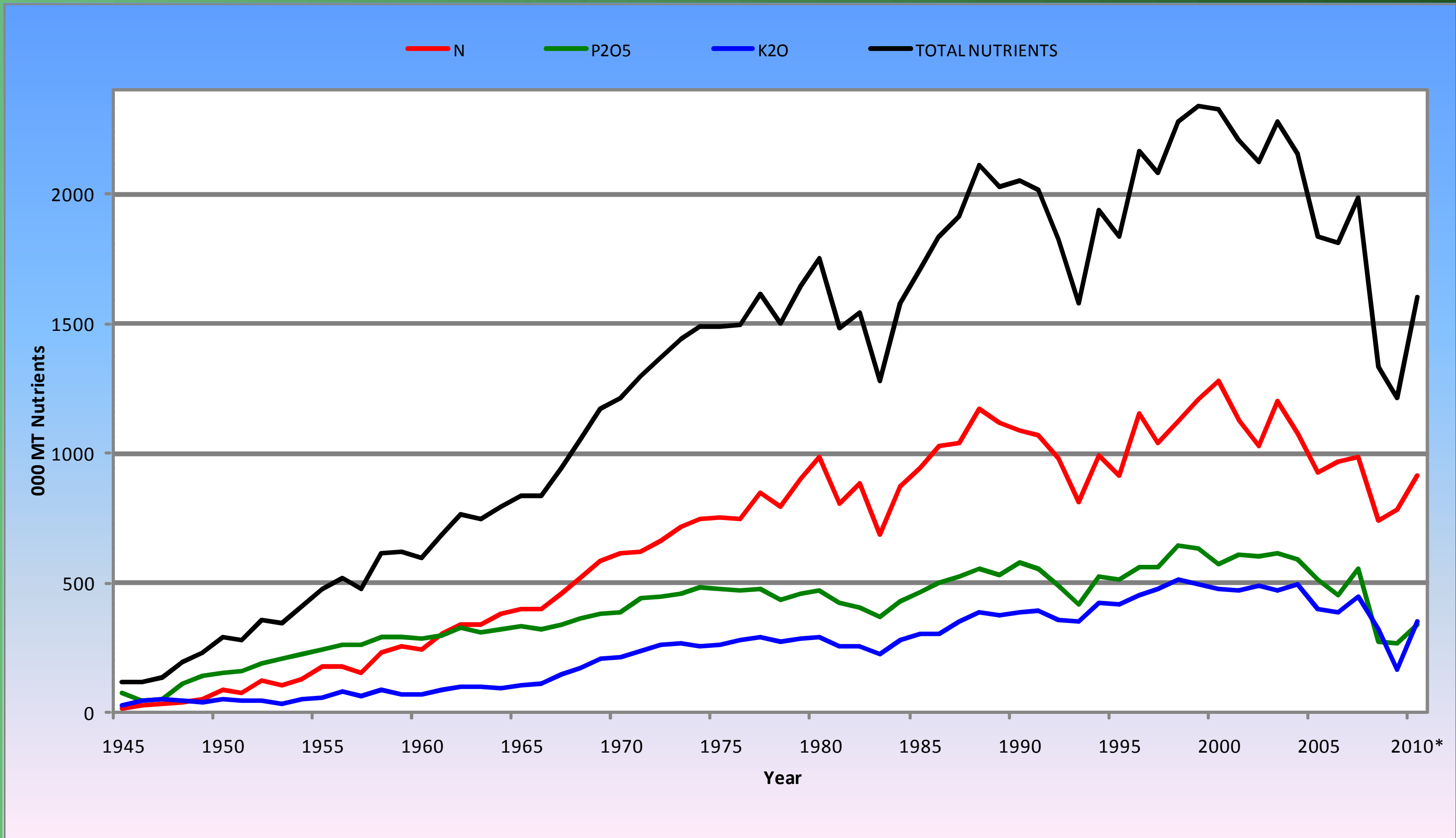
SPANISH AGRICULTURE (6)

FARMER´S INCOME VARIATION IN EU (2010 VS 2009)



SPANISH FERTILIZER MARKET (7)

FERTILIZER CONSUMPTION IN SPAIN



SPANISH FERTILIZER MARKET (8)

(000 MT OF NUTRIENT)

Nutrient	Avge. Period 2005 - 2008	2009	2010
N	906	781	941
P_2O_5	448	264	338
K_2O	393	166	360
Total Market	**1.747**	**1.211**	**1.639**

SPANISH FERTILIZER MARKET (9)

Product	Avge. period 2005-2008	2009	2010
Ammonium Sulphate	400.000 MT	295.000 MT	288.000 MT
CAN	800.000 MT	650.000 MT	807.000 MT
AN	100.000 MT	105.000 MT	130.000 MT
Urea	500.000 MT	560.000 MT	619.000 MT
UAN	170.000 MT	220.000 MT	206.000 MT
SSP	70.000 MT	38.000 MT	114.000 MT
TSP	30.000 MT	8.000 MT	14.000 MT
ClK	200.000 MT	59.000 MT	166.000 MT
SOP	40.000 MT	18.000 MT	37.000 MT
MAP	50.000 MT	32.000 MT	39.000 MT
DAP	300.000 MT	290.000 MT	178.000 MT
NPK	1.400.000 MT	680.000 MT	1.406.000 MT
NK (Potassium Nitrate)	160.000 MT	85.000 MT	150.000 MT
Total market:	**4.220.000 MT**	**3.040.000 MT**	**3.993.000 MT**

The total market is around 4.510.000 MT in 2010 (3.330.000 MT in 2009) adding some other products as ASN, Calcium Nitrate, mixed N straight products, etc. Important market for phosphoric acid for fertigation and NPK liquid producers.

SPANISH FERTILIZER MARKET (10)

(000 MT of product)

PRODUCTS	Production		Imports		Agricultural Sales		Exports	
	2009	2010	2009	2010	2009	2010	2009	2010
Straight Nitrogen Products	1.997	1.969	1.105	1.360	2.081	2.383	585	617
Phosphates	51	172	48	56	81	152	17	38
Potash	579	522	96	264	77	202	267	667
NPK, NP, PK & NK	612	1.321	610	863	1.088	1.733	257	384
TOTAL MARKET	**3.239**	**3.984**	**1.859**	**2.533**	**3.327**	**4.510**	**1.126**	**1706**

SPANISH FERTILIZER MARKET (11)

Nutrients and Fertilizer Consumption Period 2007/2011 Fertilizer Years July/June (000 MT)							
	2010/2011 estimate	2009/2010	% 10-11/09-10	2008/2009	% 10-11/08-09	2007/2008	% 10-11/07-08
NUTRIENTS							
N	965	813	19	732	32	977	-1
P_2O_5	370	324	14	160	130	526	-30
K_2O	365	274	32	191	90	432	-16
TOTAL	1.700	1411	20	1083	57	1935	-12
PRODUCT GROUP							
Nitrogen	2.400	2.060	17	2.020	19	2.370	1,3
Phosphates	165	100	65	70	136	250	-34
Potassium	210	150	40	90	133	245	-14
NPK, NP, PK & NK	1.900	1.460	30	1.000	90	2.280	-17
TOTAL	4.675	3770	24	3180	47	5145	-9

SPANISH FERTILIZER MARKET (12)

- From the market reduction in 2008 (from 2000 to 2008 variations were mainly due to rain fall and never over ±5%) demand has recovered in 2010/2011 but stays below 2000-2007 average.

- Demand for nitrogen products recuperated previous levels due to improved “commodity” prices and farmers conviction of N immediate results.

- Regarding phosphates and potash, demand in 2010/2011 improves but previous levels were not reached again.

- We estimate that demand for NPK´s, DAP and MOP will not recuperate the 2000/2005 levels and we will see a reduction on NPK´s demand and an increase in the use of blends.

SPANISH FERTILIZER MARKET (13)

EVOLUTION OF NUTRIENT DOSIS APPLIED (PERIOD 1950-2010)

Kg nutrient/ha

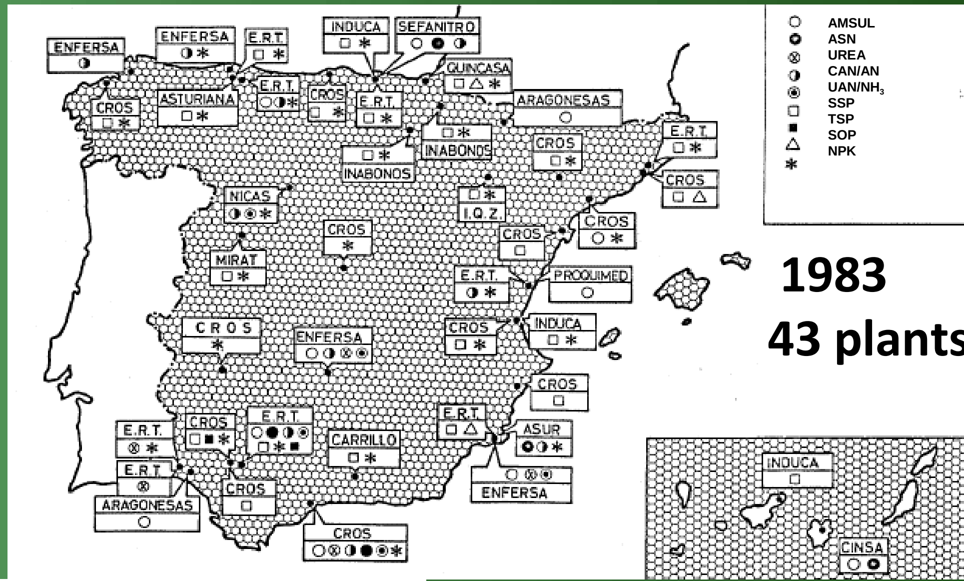
Year	Acreage fertilized (000 has)	Kg of nutrient applied		
		N	P_2O_5	K_2O
1950	16.093	4,6	10,0	2,7
1960	16.255	14,9	17,7	4,3
1970	16.978	35,7	23,2	12,2
1980	17.057	57,7	27,8	17,2
1990	17.400	61,7	33,0	21,9
2000	16.422	77,0	34,3	28,6
2005	15.755	58,9	32,6	26,3
2009	15.400	50,7	17,2	10,8
2010	14.500(est.)	63,1	23,4	24,1

Acreage fertilized = Cultivated land – fallow + pastures

SPANISH FERTILIZER MARKET (14)

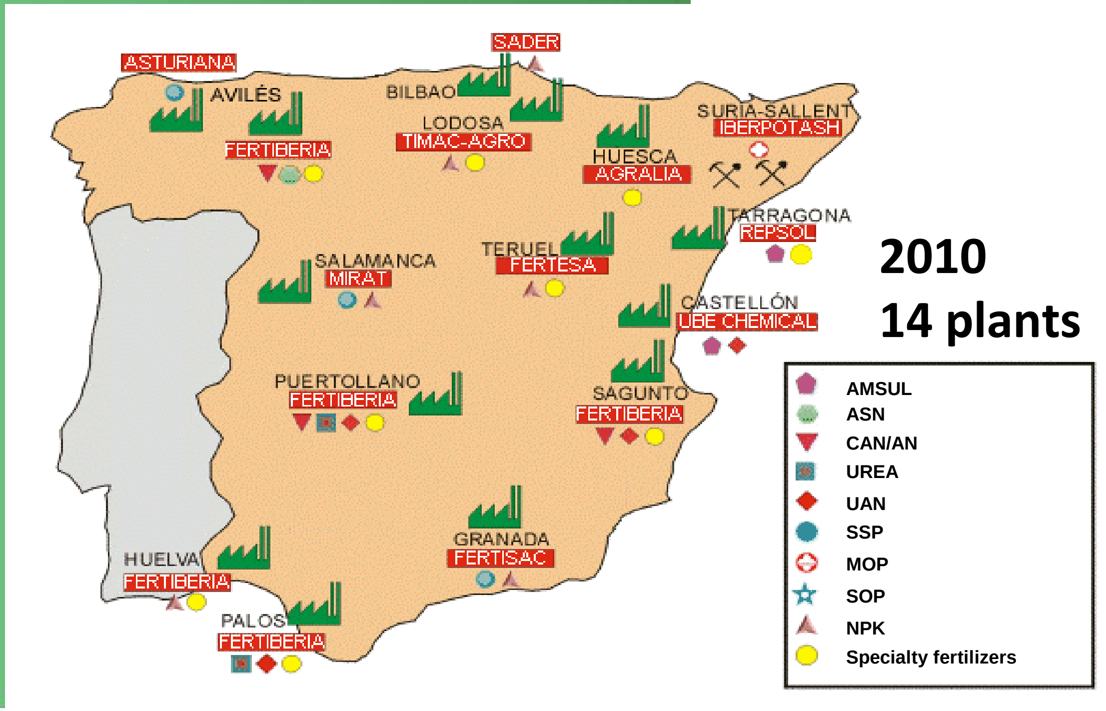
Chart 1.1 Consumption N, P_2O_5 and K_2O by crops in Spain. Year 2006/2007				
CROPS	Surface (000 ha)	N (kg/ha)	P_2O_5 (kg/ha)	K_2O (kg/ha)
Cereals	6.256	80	40	27
Pulses	313	20	10	5
Potatoes	91	130	70	95
Sunflower	601	10	5	3
Forage	1.082	30	25	25
Vegetables	358	150	75	95
Citrus trees	273	260	80	150
Fruit trees	274	95	60	80
Olive trees	2.395	45	12	20
Vineyard	1.052	35	27	30
Other crops	818	47	25	16
TOTAL	**13.513**	**65**	**32**	**21**

SPANISH FERTILIZER MARKET (15)



1983

43 plants



2010

14 plants

SPAIN&PORTUGAL FERTILIZER INDUSTRY (16)

(Comments)

- Fertiberia, produces CAN/AN 1.000.000 MT, Urea 350.000, UAN 80.000 MT, ASN 80.000 MT, MAP 70.000 MT, DAP 220.000 MT and NPK 250.000 MT.

Today ADP(Adubos de Portugal) is part of Fertiberia, so Spain and Portugal are a single market and ADP production should be added (220.000 MT of CAN, 240.000 MT of NPK´s)

- NPK local producers: Roullier (Inabonos) (250.000 MT) Agrimartin (250.000MT) SA Mirat (120.000 MT) Sader(70.000 MT) and Fertisac(70.000 MT) Asturiana producing SSP (100.000 MT) SAPEC in Portugal produces specialty NPK´s (100.000 MT)

- The phosacid plant of Fertiberia in Huelva was shutdown in December 2010.

There is an agreement with OCP to import acid and keep production of MAP/DAP and NPK´s in Huelva.

- Fertiberia is clearly the leader in Spanish market and decides local prices, always following international/European ones.

- Fertiberia and all other producers are also importers of fertilizers non produced by themselves and basically raw materials.

SPANISH FERTILIZER DISTRIBUTION NETWORK (17)

- Private wholesalers: 15-18 companies with yearly volumes going from 600.000 MT/year -the biggest- to 70.000 MT/year -the smallest-
- Big Cooperatives: 5-6 big coops working with fertilizers as private wholesalers do.
- Three subsidiaries of Fertiberia acting as wholesaler-retailers.
- Retailers: with some entity 40-50 out of a total of more than 200 fertilizer retailers.
- 80% of the market follows the scheme wholesalers-retailers/small coops.
- 20 % of the market follows the scheme Big coop-small coop.

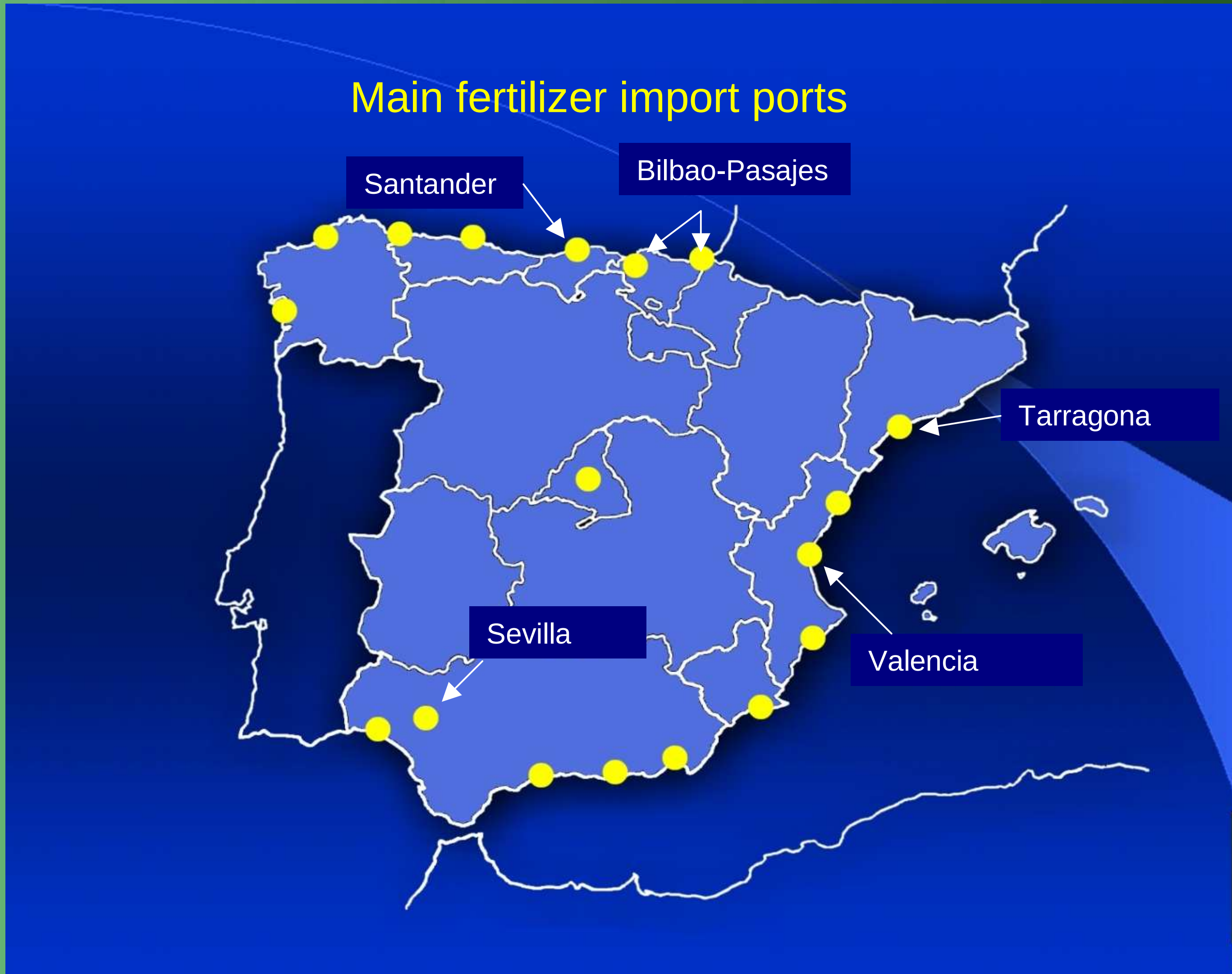
SPANISH FERTILIZER MARKET (18)
Production / Import

- Spanish market is supplied 55 % by local produced fertilizers and 45 % by imported ones. In 2010 the reduction of the total market affected much more the imports, than the local production, excepted in NPK, where local production has been also reduced.

- Yara and Fertiva/K+S have their local offices in Spain, and if we count the product coming from ADP (Portugal) as imported into Spain, these three are the biggest importers, except for CAN which is supplied by Fertiberia to Yara and “K+S” for local sales.

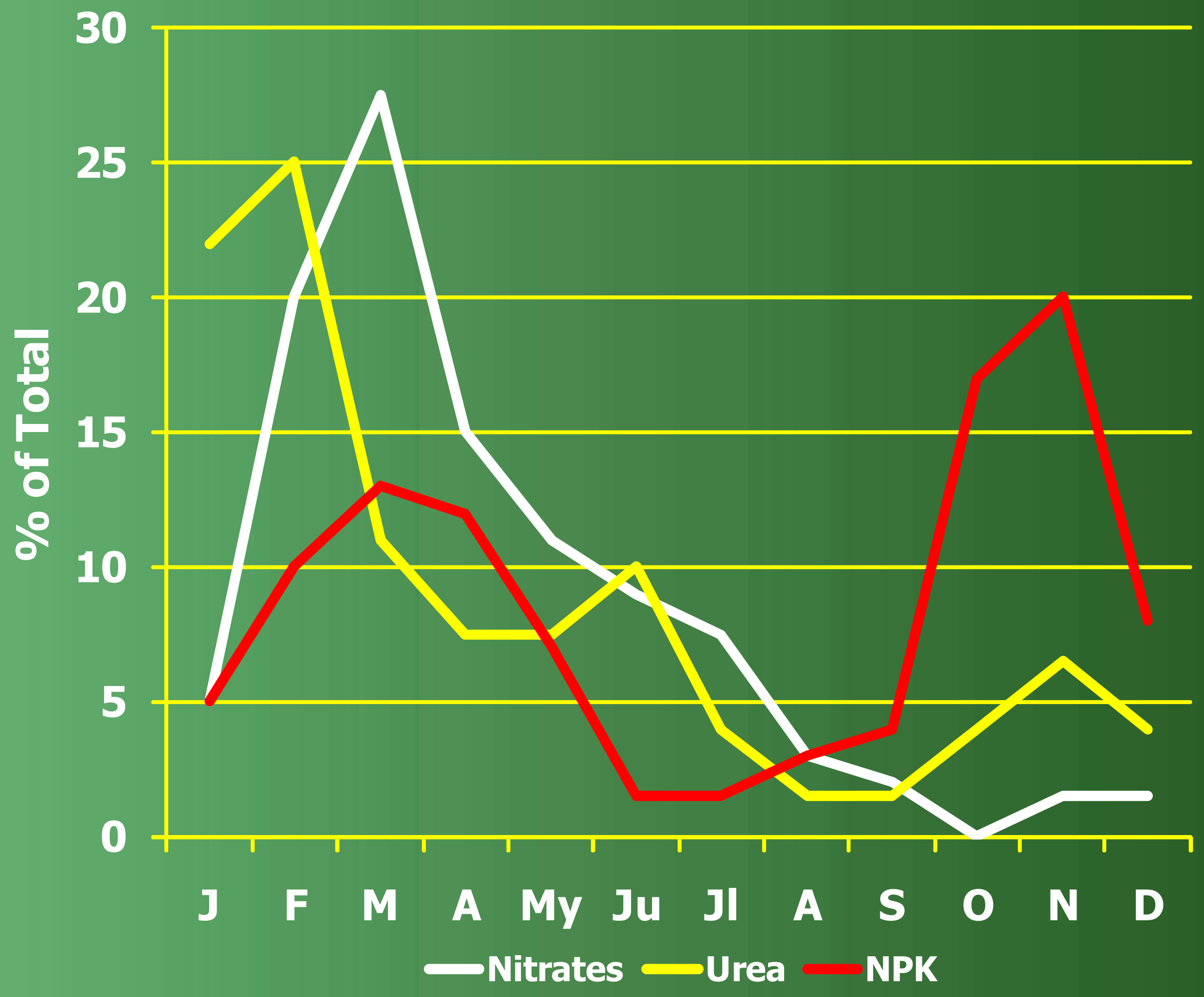
- Total imports amount for 2.000.000 MT, of which Urea is the more important product

SPANISH FERTILIZER MARKET (19)
LOGISTICS



SPANISH FERTILIZER MARKET (20)

Seasonality of application



Thank you
for your attention