

ARVALIS
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Grain Corn Production in France

agri benchmark Global Forum

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Outlook

- Trends in corn production in France
- EU/FR regulations and their impact
- Trends in production cost of corn
- Challenges for French corn production

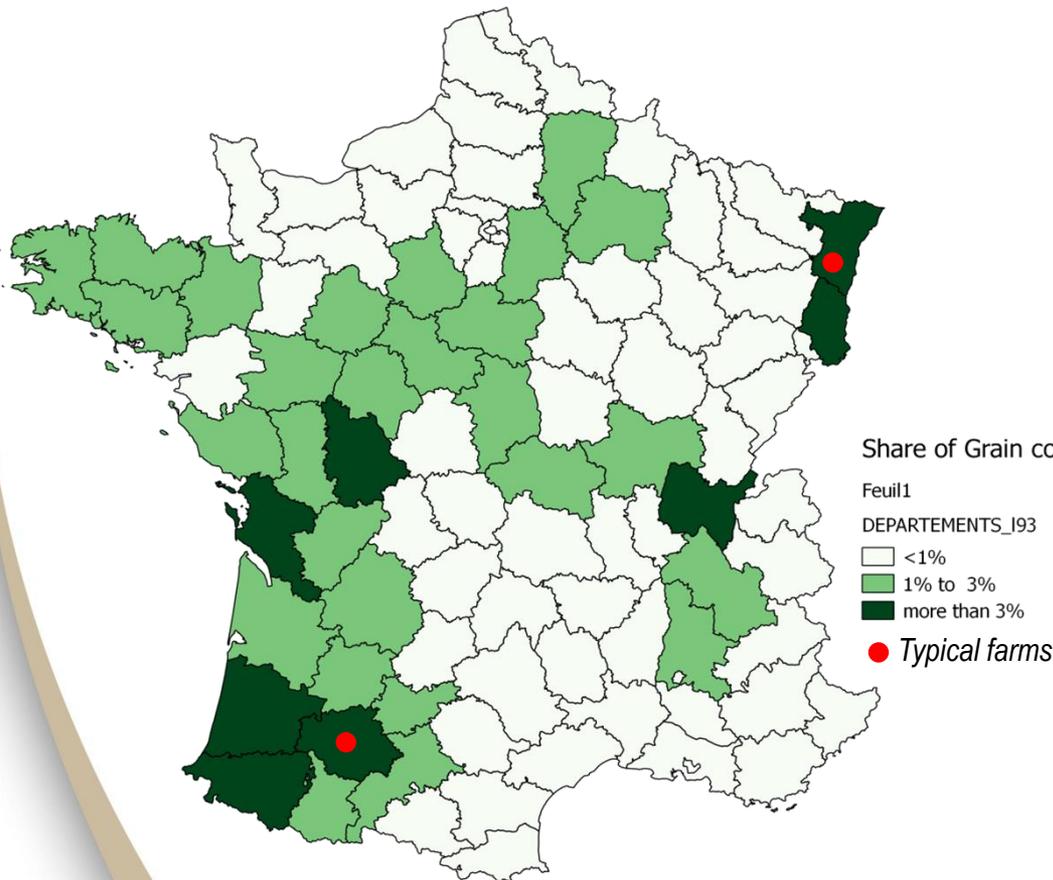
Key figures



Map of Corn Production

Major grain corn regions:

- Alsace
- Southwest



Key figures on corn production (2010-14 avg):

Total area: 1.6 Mha

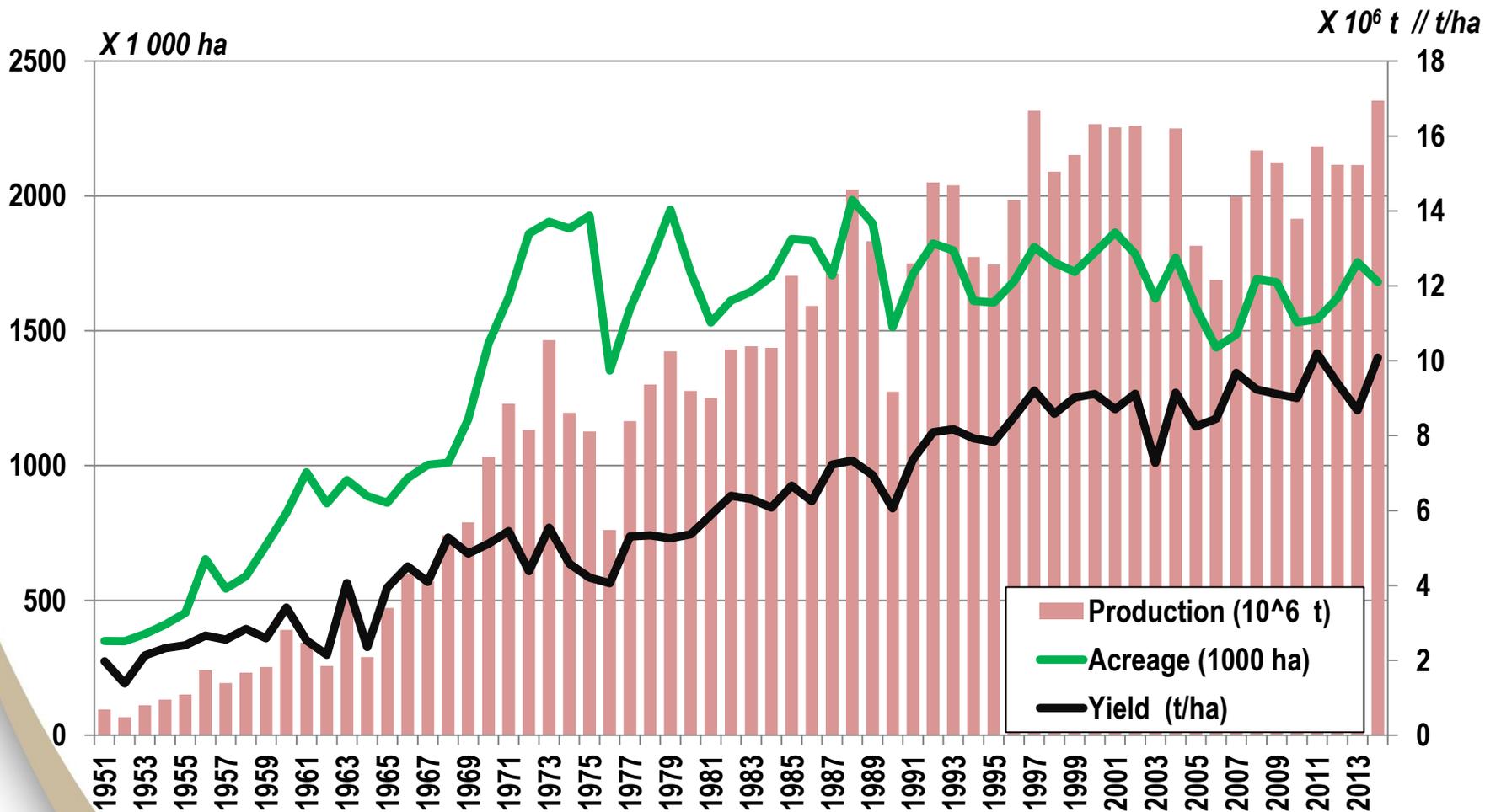
Average yield: 9.5 t/ha

Total production: 15.3 Mt⁵

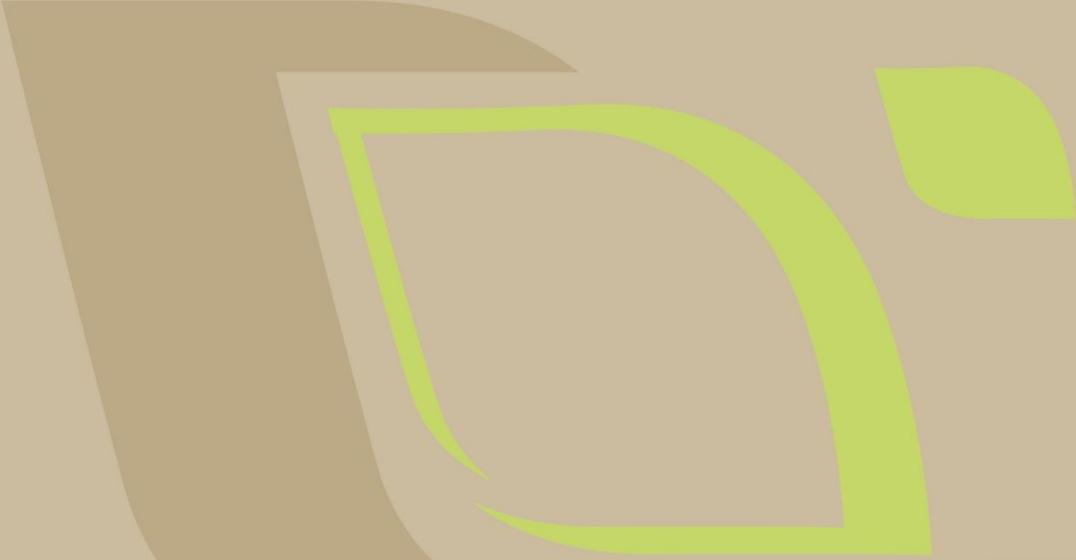


Corn Production in France :

Yield increase = driver of production



Source : French Ministry of agriculture, 2015



EU legislation and its impact on French crop farms

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Design of New CAP Policy



Current Euros

Annual CAP Budget
(53 mil. € - 39% of UE's)

Transversal regulation: cross compliance

CMO

First Pillar

Second Pillar

Market measures

Crisis Management

Direct payments

Greening

Rural development

Risk management

Specific payments to marginal zones

400 mil. €

40 mil. €

12 mil. €



(* Co-financed (EU-MS))

First Pillar Measure: Options for France

Measures	Bruxelles	France (2019)**
Unfavored zones	Max 5%	0 %
Coupled payments to certain production	Max 13% + 2%	13% + 2%
Redistributive payments	Max 30%	20%
Specific payment for young farmers	Max 2%	1%
Greening	30%	30%
Basic payment	The remaining	34%

Non compulsory measures

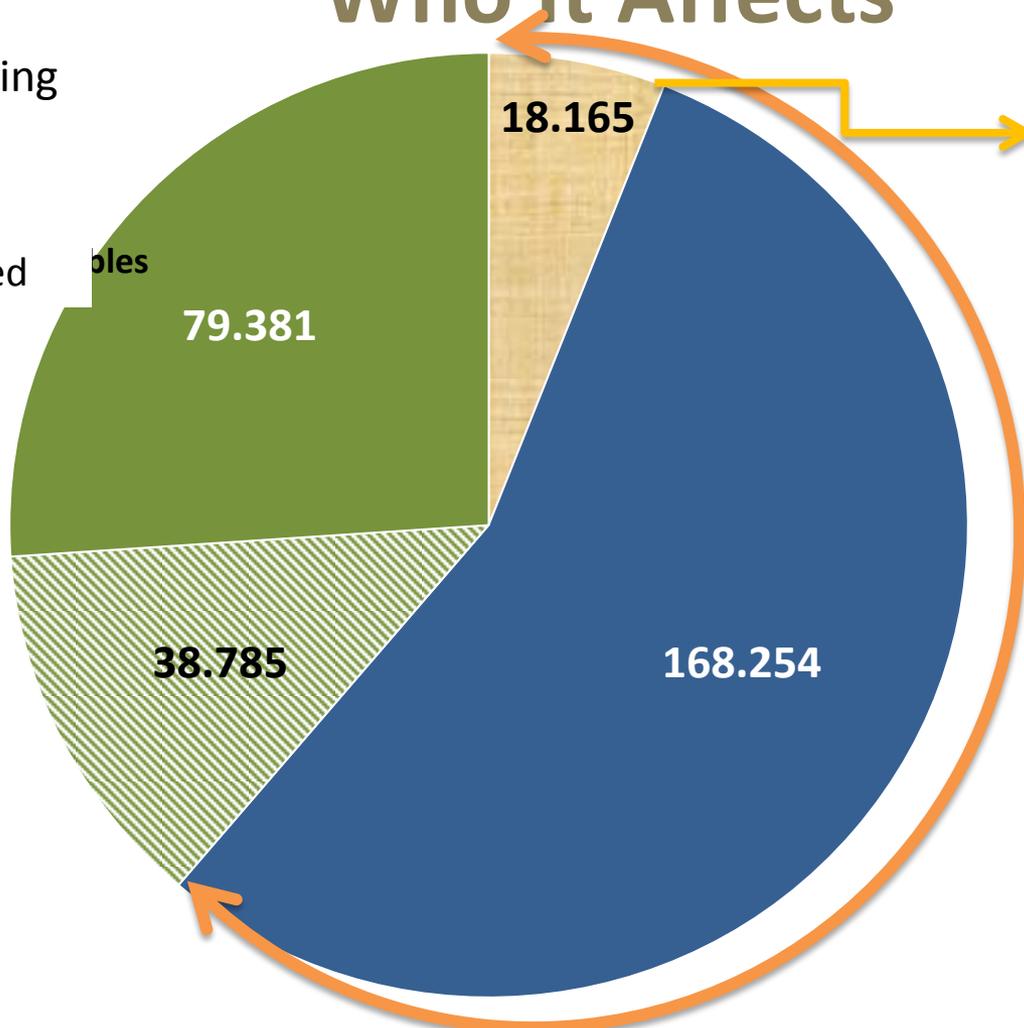
Compulsory measures

**** Share of the national budget to finance the measures (in %)**



Greening Diversification : Who It Affects

- Not respecting
- Respecting
- ▨ exempted
- Not concerned



Hectares to change :
44 000 ha of corn
14 000 ha of wheat
8 700 ha of grassland

186.400 ha of land
still needs to
comply

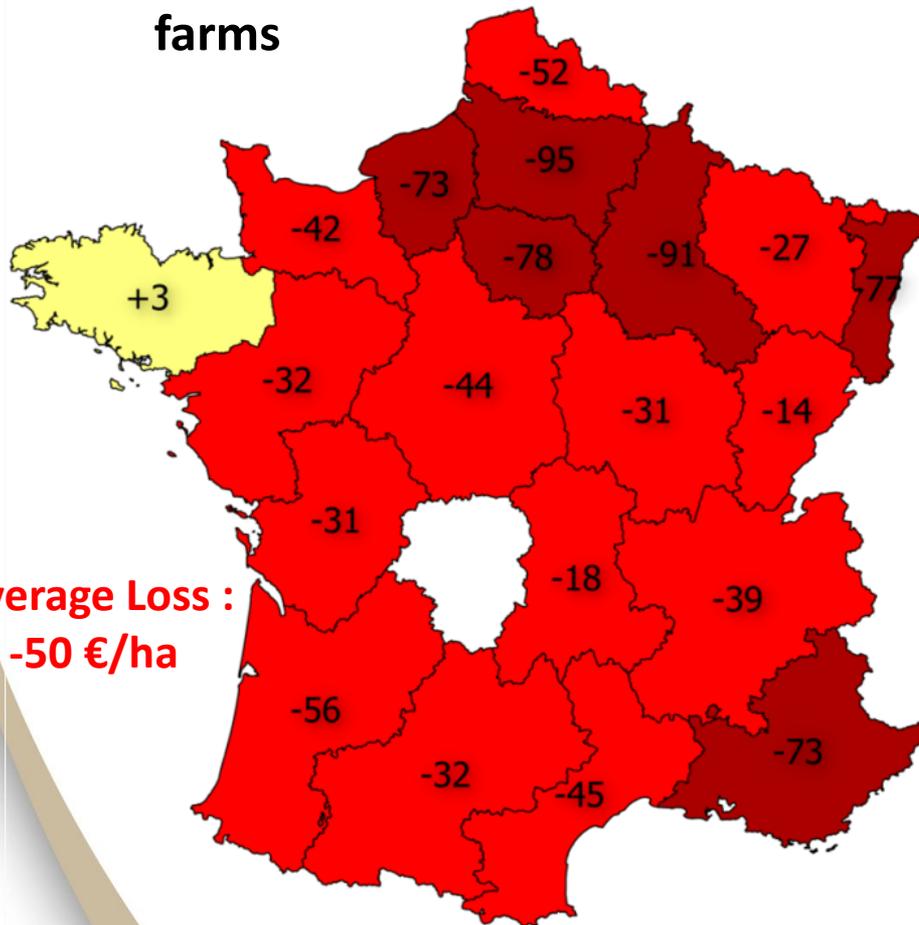
Source agreste/Rica 2012



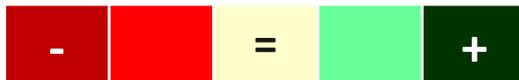
**Threat on monoculture Corn...
but certification measure**

Average Payment Loss Due to the New CAP Policy in France

Crop-producing farms



Average Loss :
-50 €/ha



- **New CAP will be favorable to :**
 - beef and dairy production (due to the abolition of the milk quotas in Apr 2015)
 - smallholder farms
- **Greening is not that important for crop farms**
- **May see an increase of soybeans thanks to a €150 coupled payments (especially in the Southwest) : compete with corn**



Cross Compliance and Environmental Policies

Nitrate Directive:

- Limit the amount of N in vulnerable zones
- Farmers need to monitor their fertilization

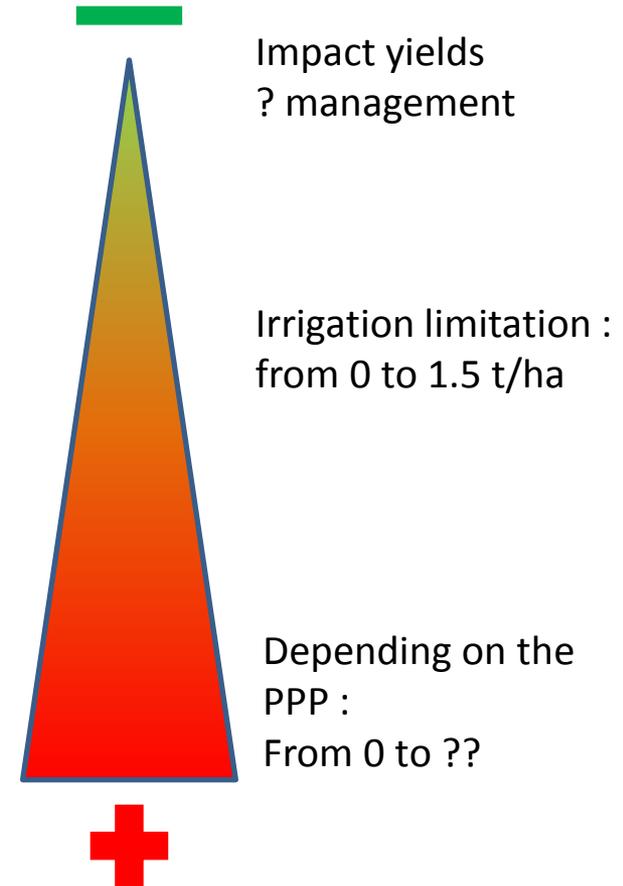
Water Directive:

- Limit the use of water in certain areas “quantity management”
- Limit pesticides leaching

Pesticides Authorization:

- EU regulation to authorize pesticide use and commercialization
- Bees! (moratorium on neonicotinoids)

Farm impact

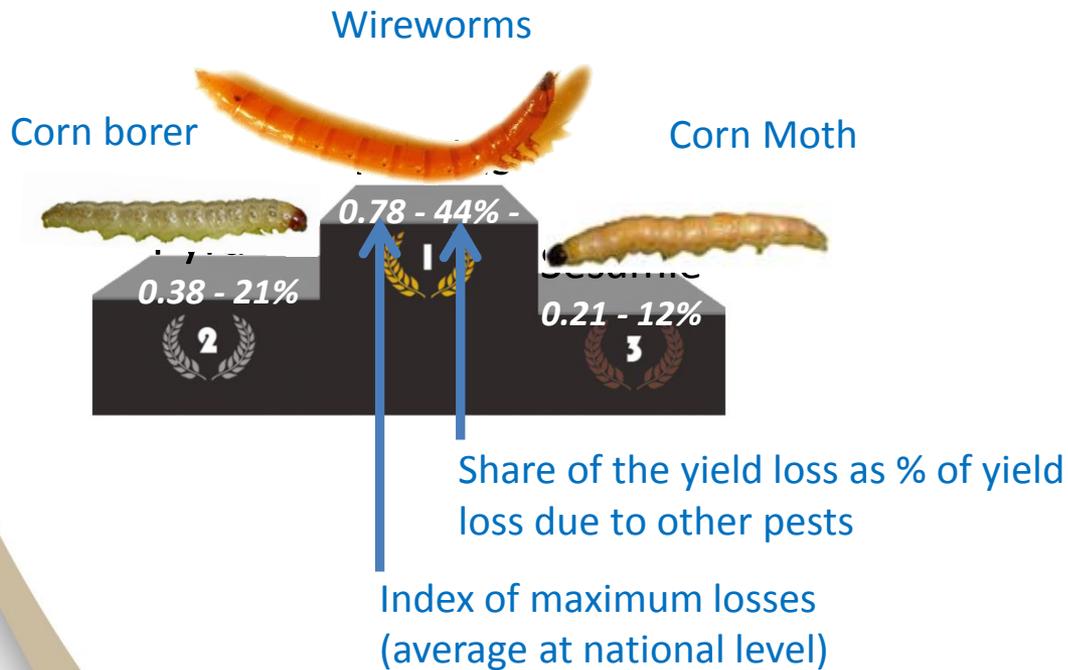




Pest pressure : impact on French corn production

Grain Corn

Pest Index = 1.75



Wireworms:

- Ban of neonicotinoids
- Bees regulation

Corn borers:

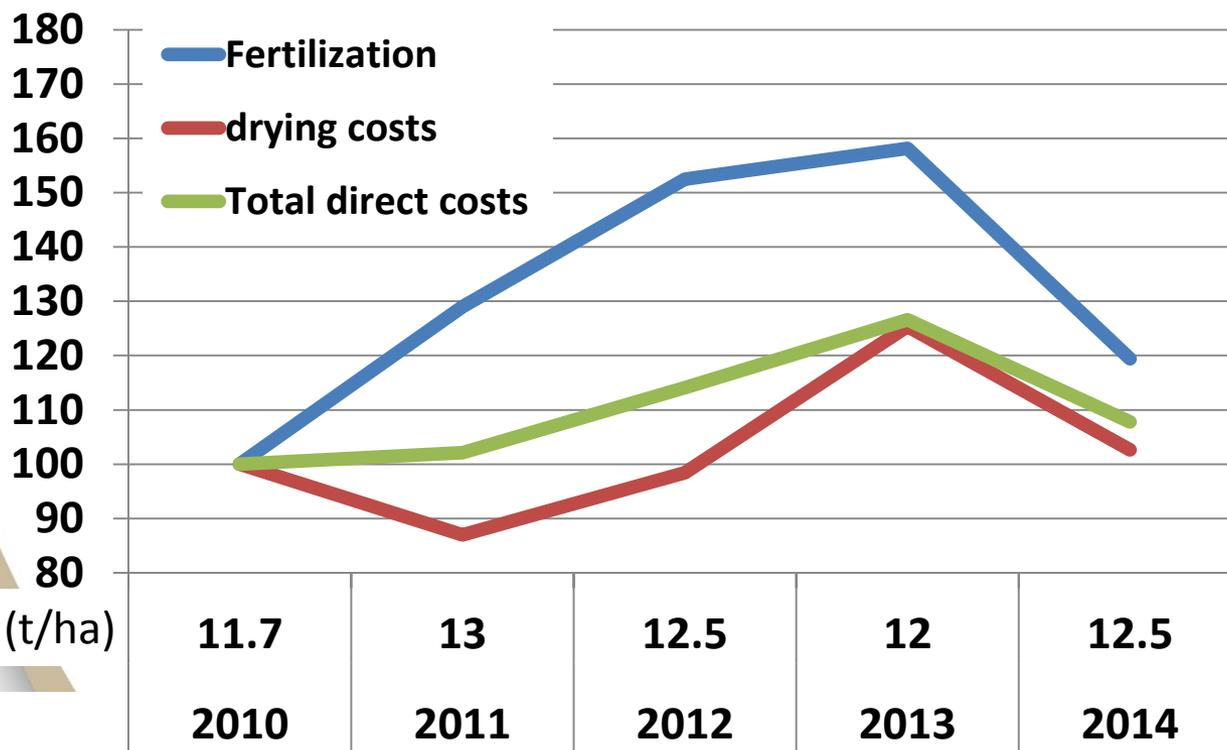
- Only trichogramma authorized (bio control)
- Ban of spraying by planes
- No GM varieties

GMO Ban:
Yield loss (only for borer)
... but market opportunities (in non-GM)



Production costs : nitrogen is the principal driver (exemple : FR110ALS)

Trends in costs : fertilization (In % of CoP 2010)



Rather stable equipment costs on the period;

Corn is a « low chemical » crop in FR;

Drying costs to be monitored : 35% of the direct costs !

Yield (t/ha)

Year



Brief outlook of crop production today

Crop	seeded (x1000 ha)	Acreage evol.	reason
Wheat	5 169	3%	gain on corn acreage - more profitable
Durum	324	13%	Market opportunity : + XX € premium
Barley	1 754	- 1%	stable
Grain Corn	1 707	- 8%	low revenue last two years
Rapeseed	1 483	- 1%	stable
Pees	151	9%	New CAP programs & market opportunities

Source : Agreste/SAA, 15/07/15

Yields :

Today (07/16/15) corn is flowering in France but severe drought with T°C > 35°C :

- High risk for non irrigated corn (60% of the acreage)
- High risk for fodder (might see grain corn → silage)

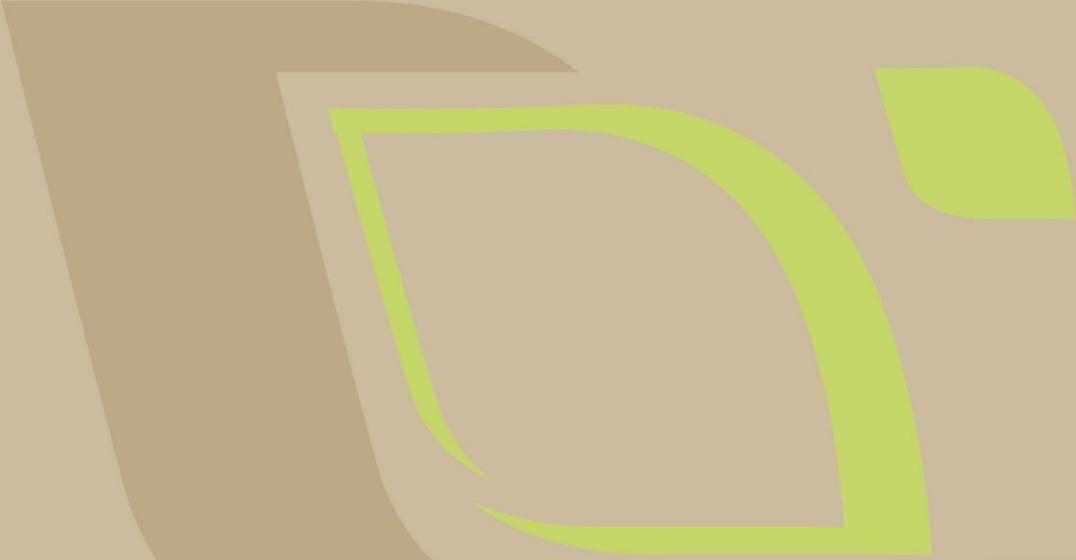


Decrease in production foreseen... but high stock levels



Summary : major challenge for corn production in France

- The “chemical” challenge
 - Seed protection vs wireworms
 - Weed control
 - Bio-control (e.g. Trichogramma)
- The “climate” challenge :
 - Water shortage (Water regulation)
 - ... new irrigation system? New rotations?
- The economic challenge :
 - Decrease of governmental supports
 - Stay competitive on the local market (new players on EU market)
 - Drying costs (new varieties??)
 - Machinery and labor



**Thank you for your
attention**

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Greening : What is that ?

■ Need to diversify your crops:

- If arable land < 10 ha → exempted
- If 10 - 30 ha of arable land → 2 crops min. and C1 = 75% max
- More than 30 ha of arable land → 3 crops min. and C1+C2 = 95% max and still C1=75% max

■ Keep permanent grassland:

- Convert 5% max of the permanent grassland: reference year = 2012
- If the national ratio decrease more than 5% (region/States) → reimplant

■ Have ecological focus area on 5% of the arable land

- Exemptions :
 - If arable land < 15 ha
 - If grassland >75 % UAA and left arable land <30 ha

**On monoculture (specifically on corn)

⇒ Certification to get a derogation

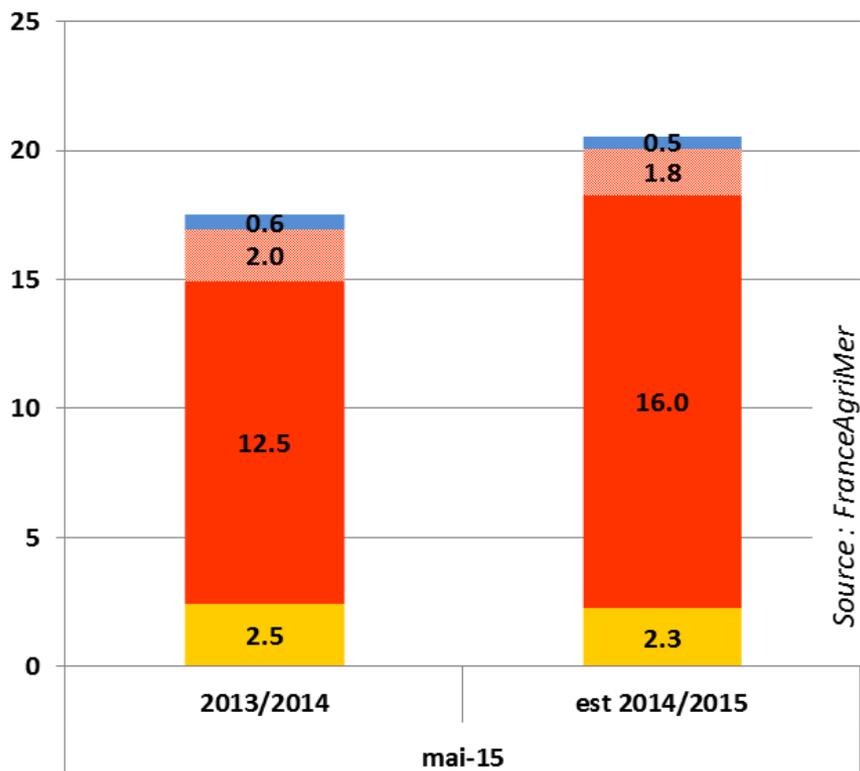
Not an issue (already existing)

Not a big issue (already existing)



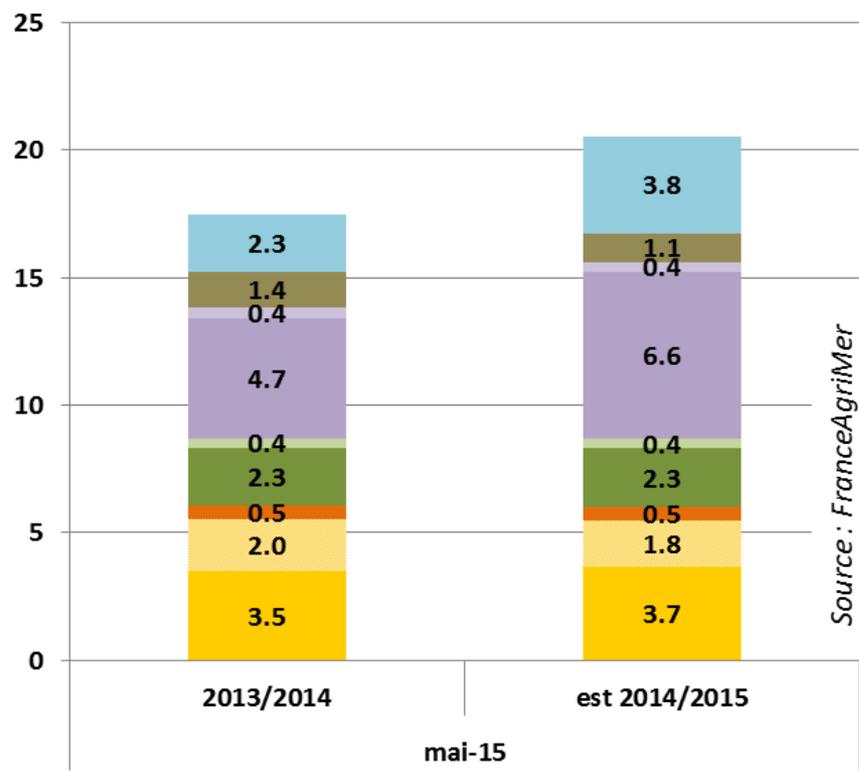
France: Corn Supply and Demand (2013/14 v est. 2014/15)

Offre - France - Maïs - Mt



Source : FranceAgriMer

Demande - France - Maïs - Mt



Source : FranceAgriMer

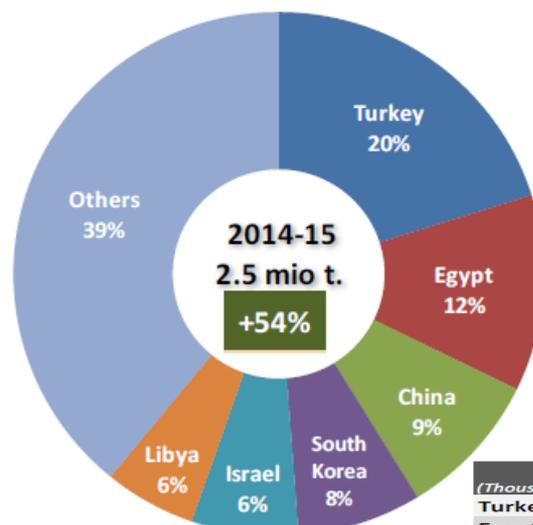
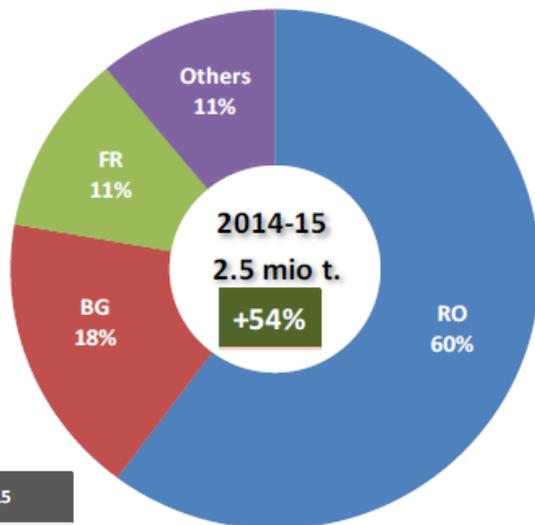


EU Corn Exports

(Sur les 9 premiers mois de campagne, produits transformés inclus)

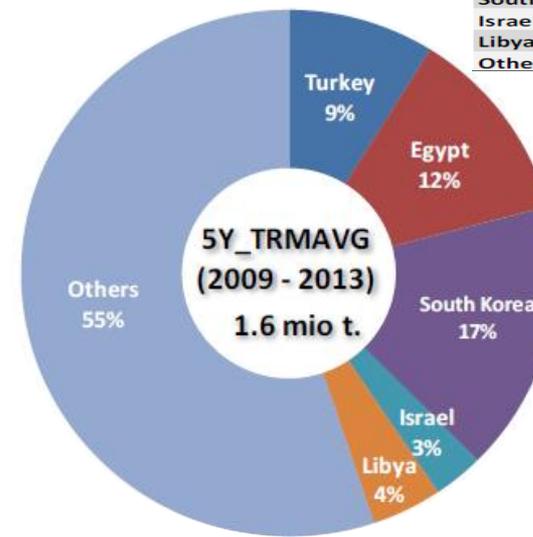
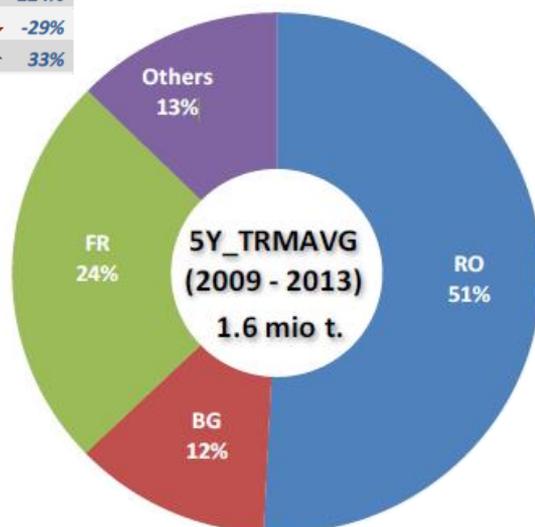
Origines

Destinations



(Thousand tons)	5Y_TRMAVG (2009 - 2013)	2014-15	% Change
RO	837	1 522	↑ 82%
BG	198	445	↑ 124%
FR	403	284	↓ -29%
Others	208	278	↑ 33%

(Thousand tons)	5Y_TRMAVG (2009 - 2013)	2014-15	% Change
Turkey	146	509	↑ 248%
Egypt	198	307	↑ 55%
China	0	227	-
South Korea	274	191	↓ -30%
Israel	50	165	↑ 229%
Libya	70	142	↑ 102%
Others	908	988	↑ 9%



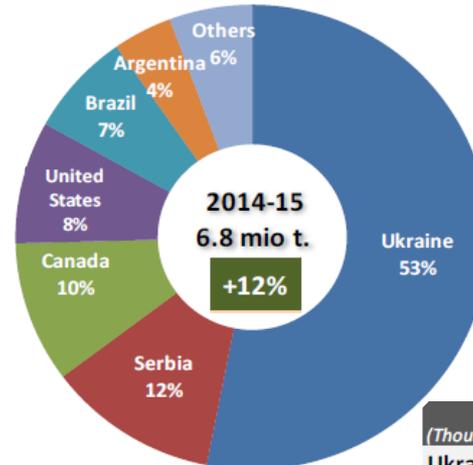
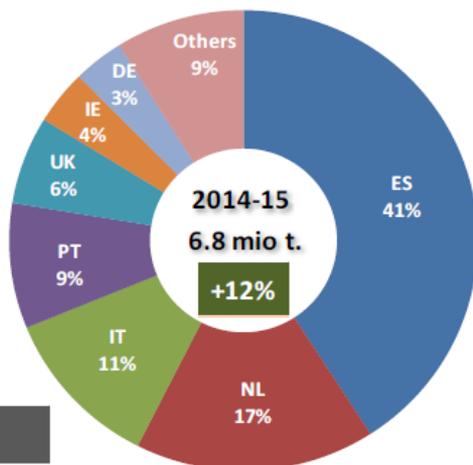


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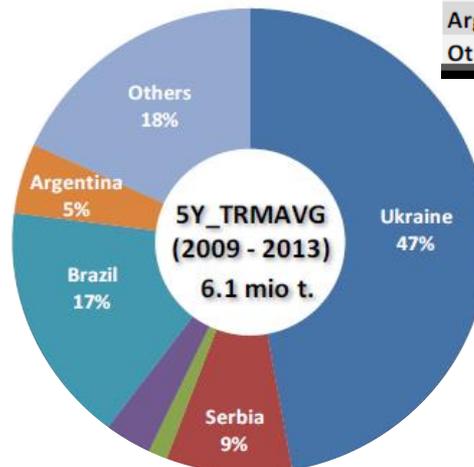
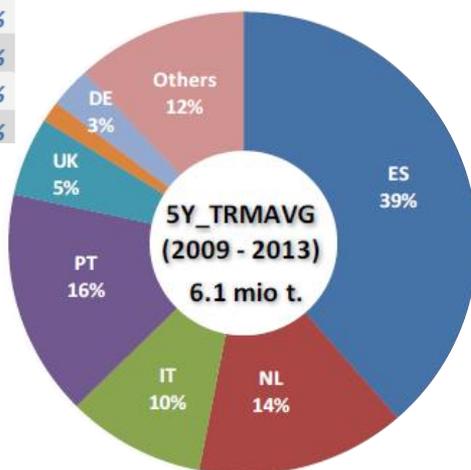
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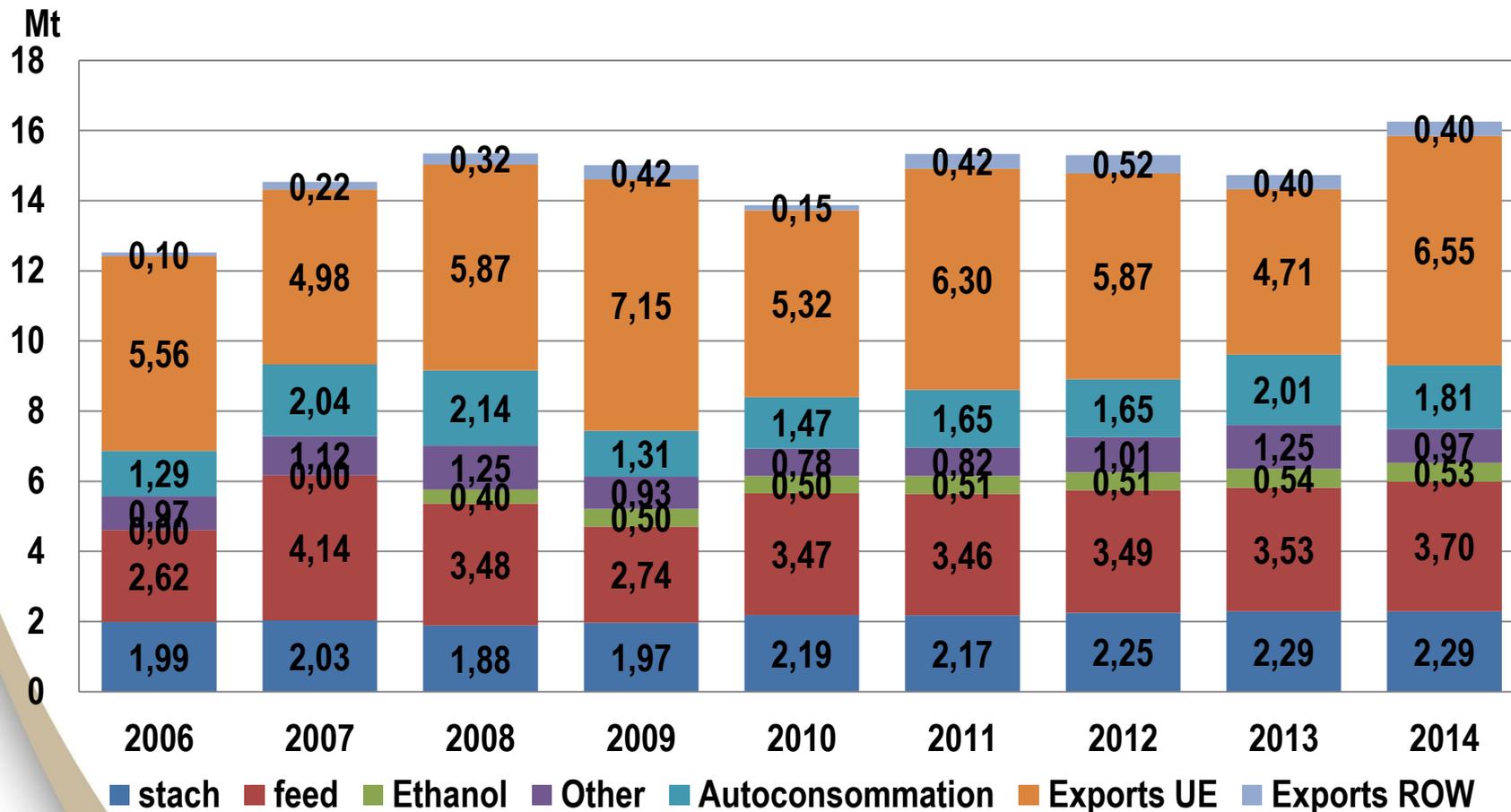
(Thousand tons)	5Y_TRMAVG (2009 - 2013)	2014-15	
ES	2 352	2 783	↑ 18%
NL	876	1 128	↑ 29%
IT	582	774	↑ 33%
PT	962	597	↓ -38%
UK	336	421	↑ 25%
IE	88	260	↑ 197%
DE	175	237	↑ 36%
Others	717	606	↓ -16%

(Thousand tons)	5Y_TRMAVG (2009 - 2013)	2014-15	
Ukraine	2 870	3 615	↑ 26%
Serbia	525	794	↑ 51%
Canada	80	667	↑ 731%
United State:	196	580	↑ 197%
Brazil	1 017	490	↓ -52%
Argentina	295	275	↓ -7%
Others	1 105	385	↓ -65%





Domestic Use of Corn



Source : France Agrimer 2015