



*How to suppress brakes
bound to Sorghum crop ?*

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?



How to manage a minor specie harvest ?

How and why maintain and promote sorghum acreage?

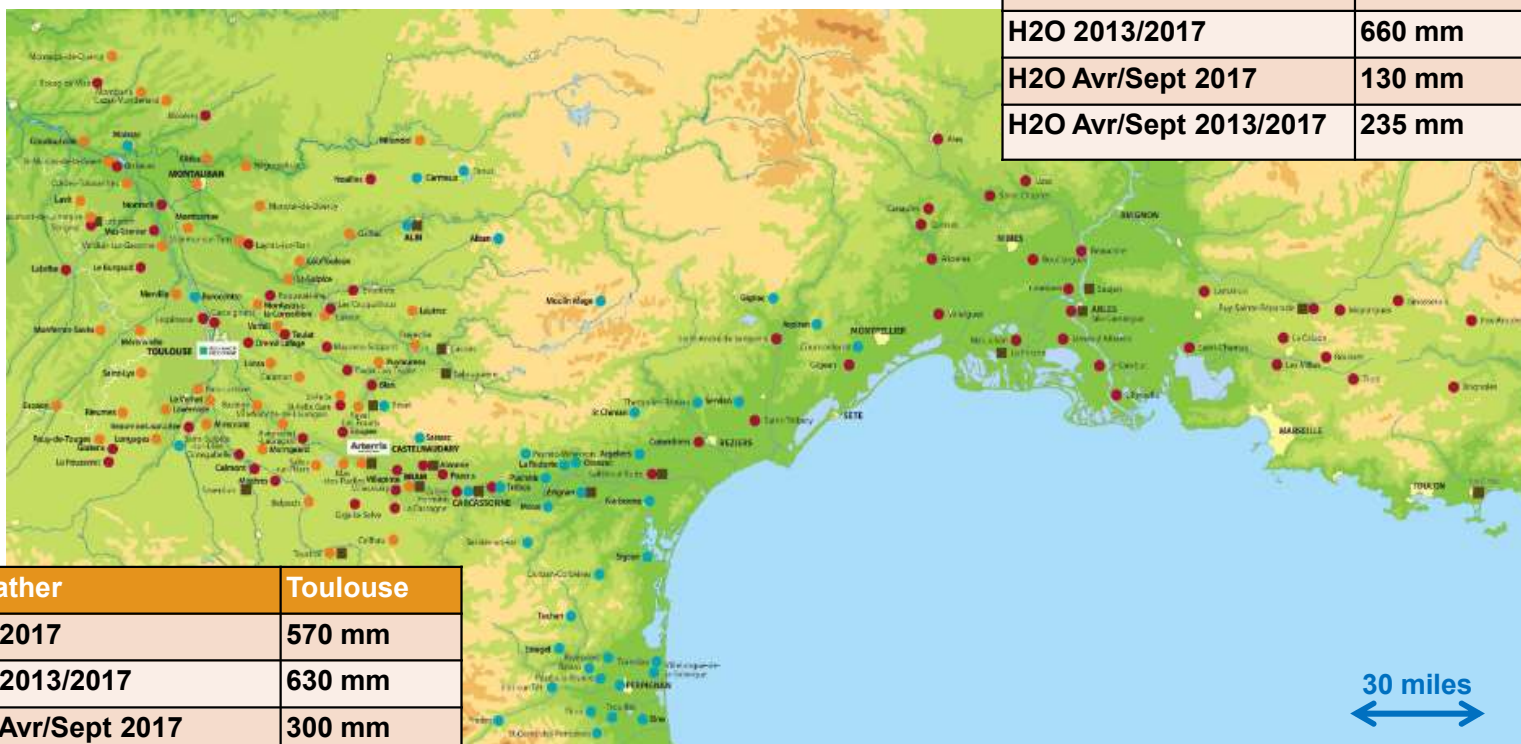
What outcomes in the business relationships with our customers?



HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

A spreaded model

Wheather	Avignon
H2O 2017	330 mm
H2O 2013/2017	660 mm
H2O Avr/Sept 2017	130 mm
H2O Avr/Sept 2013/2017	235 mm



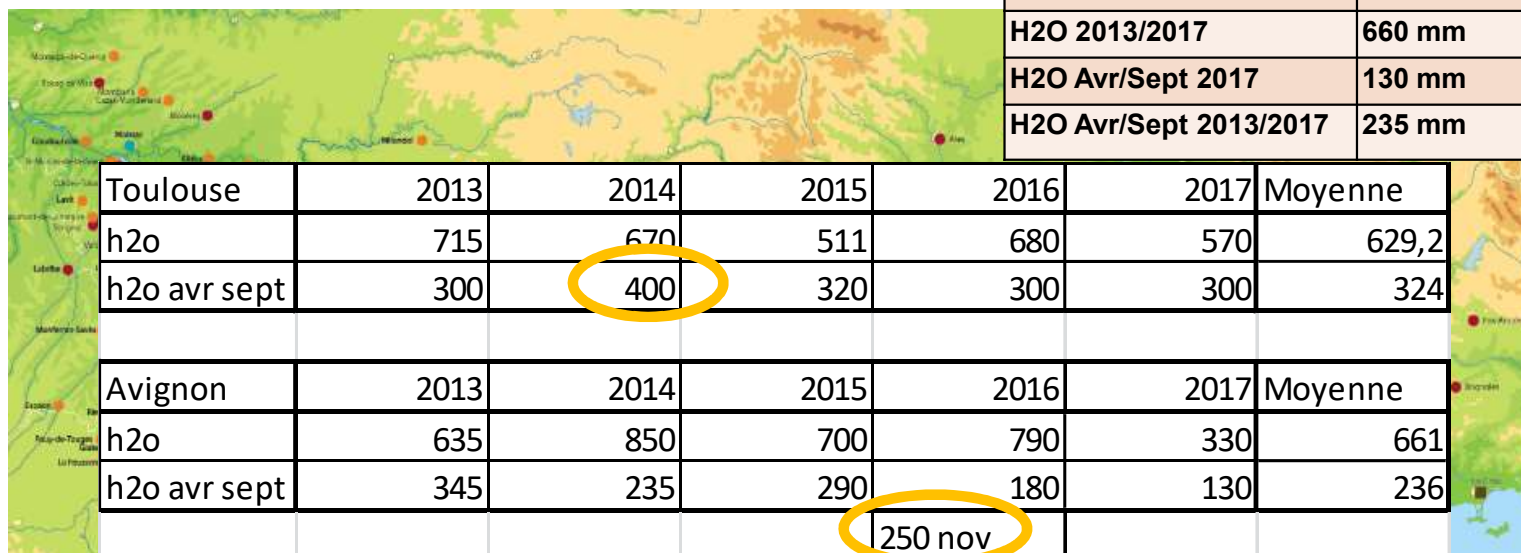
Wheather	Toulouse
H2O 2017	570 mm
H2O 2013/2017	630 mm
H2O Avr/Sept 2017	300 mm
H2O Avr/Sept 2013/2017	325 mm

- 740 000 ACRE
- 1,2MT SOLD
- 10K SUPPLIERS
- 140 SILOS
- 2 FEED FACTORIES
- 7 SEEDS FACTORIES
- 2 MILLS
- 1 HARBOUR ACCES
- 5 RAILWAYS ACCES

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

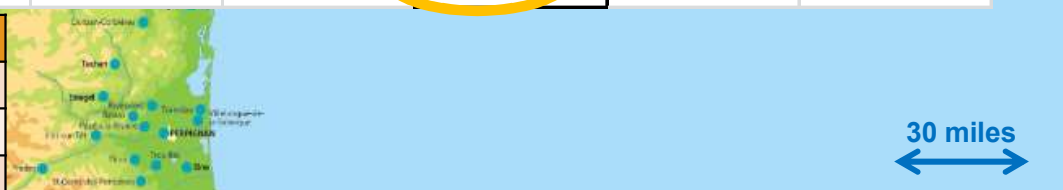
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	Toulouse	2013	2014	2015	2016	2017	Moyenne
h2o		715	670	511	680	570	629,2
h2o avr sept		300	400	320	300	300	324
Avignon		2013	2014	2015	2016	2017	Moyenne
h2o		635	850	700	790	330	661
h2o avr sept		345	235	290	180	130	236
				250 nov			

Wheather	Toulouse
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HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

Key figures

PROD FRANCE

299 kt

USE FRANCE

149 kt

EXPORTS FRANCE

140 kt

HARVEST GROUP*

31,8 à 69,4 kt

EXPORT GROUP*

26,7 à 57,9 kt

USE FEED FACTORY^{(1)*}

3,9 à 6,9 kt

AVERAGE SUPPLY*

39,8 à 69,8 t

* Alliance Occitane datas, harvests 2014 to 2017

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

How to manage a minor specie harvest ?

*Avoid logistic cost
uncontrolled growth*



HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

1 – Avoid logistic cost uncontrolled growth : harvest management

Necessity to define critical size and adapt processes according to it.

< 2kt = Micro Market

> 2kt = Niche Market or Commodity Market

Micro Market

- Low quantity
- Not possible to dedicate dryer
- Ventilated bins (seeds production).



Extreme flexibility

Limited rate

High cost (45\$/t)

High risk of handling for the staff

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

1 – Avoid logistic cost uncontrolled growth : harvest management

Necessity to define critical size and adapt processes.

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Micro Market

- Drying banisters

- > Undergone harvest :

- » Producers deliver goods
 - » Closest silo



Less transshipment. Outsourcing logistic management

Long time harvest. Freight cost.

Lots of stock points. **Preservation risks.**

- > Mastered harvest:

- » bins in fields
 - » Production contract



Short time harvest, low freight costs

High logistic management

High trucks / bins maintenance costs

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

1 – Avoid logistic cost uncontrolled growth : harvest management

Necessity to define critical size and adapt processes.

< 2kt = Micro Market

> 2kt = Niche Market or Commodity Market

Niche Market or Commodity Market

- Dedicated dryer(s)
 - > Producers deliver goods
 - > Closest silo
 - > Transfert flow to central silos



1 dryer at least
Dryers spreaded on production area

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

1 – Avoid logistic cost uncontrolled growth : harvest management

Necessity to define critical size and adapt processes.

< 2kt = Micro Market

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Niche Market or Commodity Market

- Production contract

- > Better on niche markets

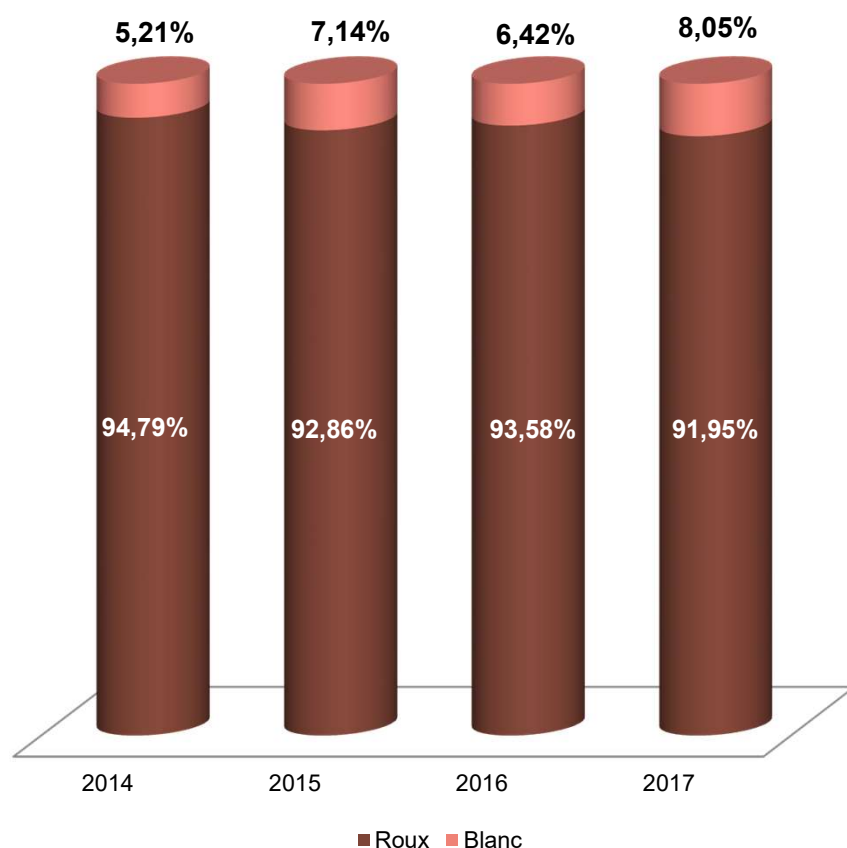
- } Production regulation
 - } Quotas not to saturate market
 - } Limit climatic risk spreading production areas

- > Hard to deal with on commodities

- } Probability of non member supply
 - } No additional valuation = no additional strain

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

1 – Avoid logistic cost uncontrolled growth: harvest management



Necessity to define critical size and adapt processes

White Sorghum

- 2 to 3 000 MT
- 17 Harvesting points
- 1 Dryer
- 1 Storage silo

Red Sorghum

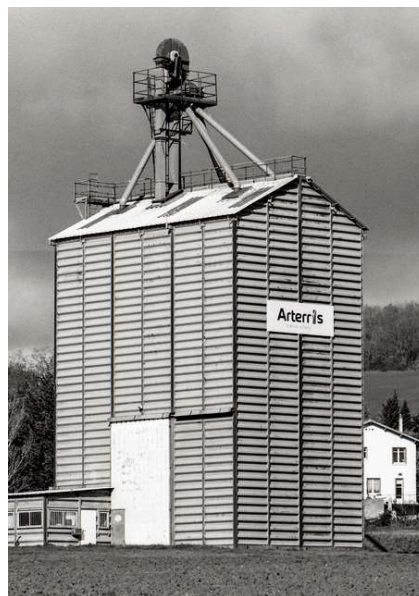
- 30 to 70 000 MT
- 93 Harvesting points
- 7 Dryers
- 11 Storage silos

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

How to manage a minor specie harvest ?

Logistic matter as critical point
Preservation of margins essential
High impact on competitiveness
High levels of expenses on micro markets
No ways to deal with on micro markets

*Avoid logistic cost
uncontrolled growth*



HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

How and why maintain and promote sorghum acreage?

Lean on agronomy and management



HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

2 – Lean on agronomy and management : Maintain and promote acreage

Widen offer to farmers

Agronomy as a support

Crop Rotation

- Deal with European Agriculture Politic frame
- Lengthen rotation cycles
- Get rid of **technical dead ends**

3rd crop

Durum Wheat / Sunflower model

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

2 – Lean on agronomy and management : Maintain and promote acreage

Widen offer to farmers


Agronomy as a support

Adaptation to the country (soil and climate)

- Which spring crop for non irrigable lands?
 - > DRY Corn : high input level, potential of 3 to 10 t/ha, standard yield 4 to 5 t/ha
 - > Soybeans : no input, potential of 2 to 3,5 t/ha, standard yield 2,5 t/ha
 - > Sorghum : low input level, potential of 5 to 8 t/ha, standard yield 6 t/ha

• True / False ?

 Resistance to hydric stress

 Soil depletion

 Hard weed management

 Dirtying fields

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

2 – Lean on agronomy and management : Maintain and promote acreage

Widen offer to farmers

Management as a springboard

Raw margin targets and possibility of reaching it according to potential yield on 3 spring crops

<i>Equivalence rendement</i>	Prix €/T	Charges opérat.	Séchage	Prime	100 €	150 €	200 €	250 €	300 €	350 €	400 €	450 €	500 €	550 €	600 €	700 €	800 €
SOJA	305	399		50	1,5	1,6	1,8	2,0	2,1	2,3	2,5	2,6	2,8	2,9	3,1	3,4	3,8
SORGHO SEC (18% humidité)	149	500	9,33	0	4,3	4,7	5,0	5,4	5,7	6,1	6,4	6,8	7,2	7,5	7,9	8,6	9,3
MAIS SEC (17% humidité)	159	611	5,58	0	4,6	5,0	5,3	5,6	5,9	6,3	6,6	6,9	7,2	7,6	7,9	8,5	9,2

	Under standard yield
	Between standard and max potential yield
	Over max potential yield

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

2 – Lean on agronomy and management : Maintain and promote acreage

Widen offer to farmers

Management as a springboard

Diversification of risk

- Facing **market volatility**
- Distributing risk in mix product or marketing ways
- **Climatic hazards**
 - > more violent
 - > more frequent

Environmental dimension

- Reducing input
- Dealing with **water use restrictions**
- Reducing Phyto index by crop changing

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

How and why maintain and promote sorghum acreage?

Acreage growth under economic conditions
Production promotion
Productions panel availability

Interesting solution
Economic and sustainable

Lean on agronomy and management



HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

What outcomes in the business relationships with our customers?



Backing on a strong marketing

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

3 – *Backing on a strong marketing : business outcomes*

Outlet reliability guarantee
stability and sustainability

Main outlets for our sorghum

■ In-house factories

- 4 to 8 000 MT annual use
- Three way hedging with Wheat / Corn / Sorghum

■ Catalunya feed manufacturers

- Buying the 2/3 of our harvest
- Only represent 10% of their annual use



HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

3 – *Backing on a strong marketing : business outcomes*

Outlet reliability guarantee
stability and sustainability

Main outlets for our sorghum

Bird feeding

- Portugal, UK and Belgium
- Small quantities and non extendable market
- Customer relationship and **customer loyalty**

Feed producers look for sorgho:

- For its color in feeding white meat poultry
- For its 1,5% protein more than corn

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

3 – *Backing on a strong marketing : business outcomes*

Outlet reliability guarantee
stability and sustainability

In-house factories

Benefits

- Secure outlet with first refusal
- Delivering facilities
 - > Proximity between factories and storage silos
 - > Flexibility
 - » delivery schedules
 - » buffer storage
- Pricing methods
 - > Framework agreement pricing on monthly observation of prices
 - > 50% of premium contracts over corn Euronext

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

3 – *Backing on a strong marketing : business outcomes*

Outlet reliability guarantee
stability and sustainability

In-house factories

Stakes of acreage fluctuation

- Pre-booking quantities
- All year long supply
- Transparency on disponibilities
- Delivering additional costs

HOW TO SUPPRESS BRAKES BOUND TO SORGHUM CROP ?

3 – *Backing on a strong marketing : business outcomes*

Outlet reliability guarantee
stability and sustainability

Niche Markets specifications

Bird feeding

- Whithe sorghum
- 14% H2O
- 2% max OM
- Visual control

Brewery

- 14,5% H2O
- 1% max OM
- Gluten free

HOW TO SUPPRESS BRAKES BOUND TO SOGHUM CROP ?

What outcomes in the business relationships with our customers?

Securing outlets
Maintain customer supply all year long
Creating new high value markets
Limit acreage fluctuations

Backing on a strong marketing

