ARTB

ASSOCIATION DE RECHERCHE TECHNIQUE BETTERAVIÈRE

Future prospects for sugar beet cultivation in France

artb-france.com

About ARTB

- Founded in **1996**

- Research and analysis work focused on « **beet-cane-sugar-energy** »

- Geographical scope of anlaysis : **international** / **european** / **french**

ARTB
ASSOCIATION DE RECHERCHE TECHNIQUE BETTERAVIÈRE

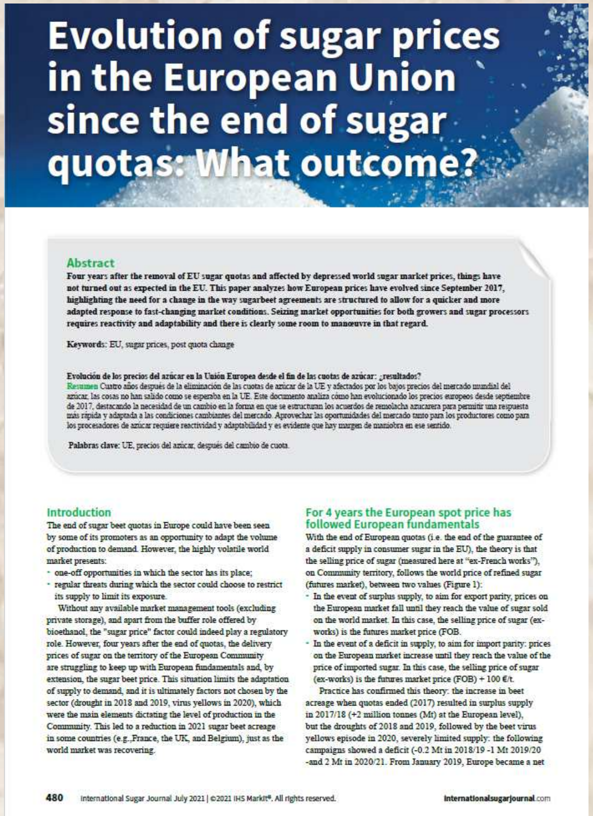
Our activities

1 Analytical work spectrum

- Market analysis (sugar / ethanol)
- Sectorial analysis
- Impact and prospective analysis
- Regulatory follow-up
- Feasibility studies
- Financial analysis of sugar groups
- Data mining & Production costs
- Project Management

Our activities

1 Recent publications at international level : International Sugar Journal (July 2021)



Evolution of sugar prices in the European Union since the end of sugar quotas: What outcome?

Abstract

Four years after the removal of EU sugar quotas and affected by depressed world sugar market prices, things have not turned out as expected in the EU. This paper analyzes how European prices have evolved since September 2017, highlighting the need for a change in the way sugarbeet agreements are structured to allow for a quicker and more adapted response to fast-changing market conditions. Seizing market opportunities for both growers and sugar processors requires reactivity and adaptability and there is clearly some room to manœuvre in that regard.

Keywords: EU, sugar prices, post quota change

Evolución de los precios del azúcar en la Unión Europea desde el fin de las cuotas de azúcar: ¿resultados?

Resumen Cuatro años después de la eliminación de las cuotas de azúcar de la UE y afectados por los bajos precios del mercado mundial del azúcar, las cosas no han salido como se esperaba en la UE. Este documento analiza cómo han evolucionado los precios europeos desde septiembre de 2017, destacando la necesidad de un cambio en la forma en que se estructuran los acuerdos de remolacha azucarera para permitir una respuesta más rápida y adaptada a las condiciones cambiantes del mercado. Aprovechar las oportunidades del mercado tanto para los productores como para los procesadores de azúcar requiere reactividad y adaptabilidad y es evidente que hay margen de maniobra en ese sentido.

Palabras clave: UE, precios del azúcar, después del cambio de cuota.

Introduction

The end of sugar beet quotas in Europe could have been seen by some of its promoters as an opportunity to adapt the volume of production to demand. However, the highly volatile world market presents:

- one-off opportunities in which the sector has its place;
- regular threats during which the sector could choose to restrict its supply to limit its exposure.

Without any available market management tools (excluding private storage), and apart from the buffer role offered by bioethanol, the "sugar price" factor could indeed play a regulatory role. However, four years after the end of quotas, the delivery prices of sugar on the territory of the European Community are struggling to keep up with European fundamentals and, by extension, the sugar beet price. This situation limits the adaptation of supply to demand, and it is ultimately factors not chosen by the sector (drought in 2018 and 2019, virus yellows in 2020), which were the main elements dictating the level of production in the Community. This led to a reduction in 2021 sugar beet acreage in some countries (e.g.,France, the UK, and Belgium), just as the world market was recovering.

For 4 years the European spot price has followed European fundamentals

With the end of European quotas (i.e. the end of the guarantee of a deficit supply in consumer sugar in the EU), the theory is that the selling price of sugar (measured here at "ex-French works"), on Community territory, follows the world price of refined sugar (futures market), between two values (Figure 1):

- In the event of surplus supply, to aim for export parity, prices on the European market fall until they reach the value of sugar sold on the world market. In this case, the selling price of sugar (ex-works) is the futures market price (FOB.
- In the event of a deficit in supply, to aim for import parity: prices on the European market increase until they reach the value of the price of imported sugar. In this case, the selling price of sugar (ex-works) is the futures market price (FOB) + 100 €/t.

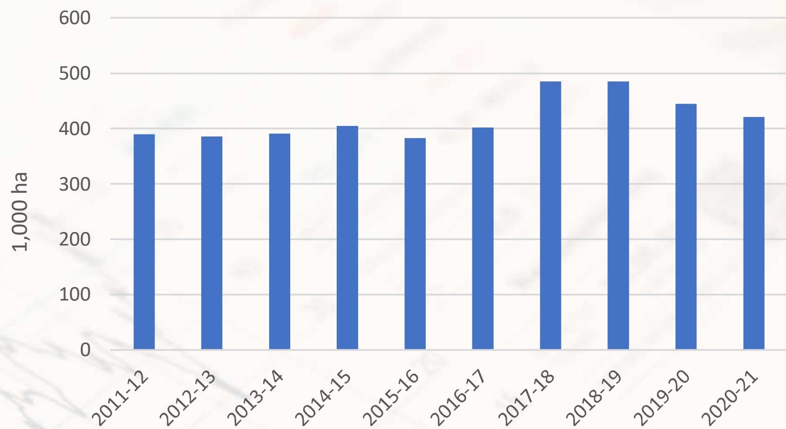
Practice has confirmed this theory: the increase in beet acreage when quotas ended (2017) resulted in surplus supply in 2017/18 (+2 million tonnes (Mt) at the European level), but the droughts of 2018 and 2019, followed by the beet virus yellows episode in 2020, severely limited supply: the following campaigns showed a deficit (-0.2 Mt in 2018/19 -1 Mt 2019/20 -and 2 Mt in 2020/21. From January 2019, Europe became a net

ARTB
ASSOCIATION DE RECHERCHE TECHNIQUE BETTERAVIÈRE

Sugarbeet in France

- Acreage = 402,000 ha (2021-22)
- 23,500 beet growers
- 5 sugar processing groups
- 21 beet processing facilities
  - ✓ Tereos (9)
  - ✓ CU (8)
  - ✓ SLS (2)
  - ✓ Lesaffre (1)
  - ✓ Ouvré (1)

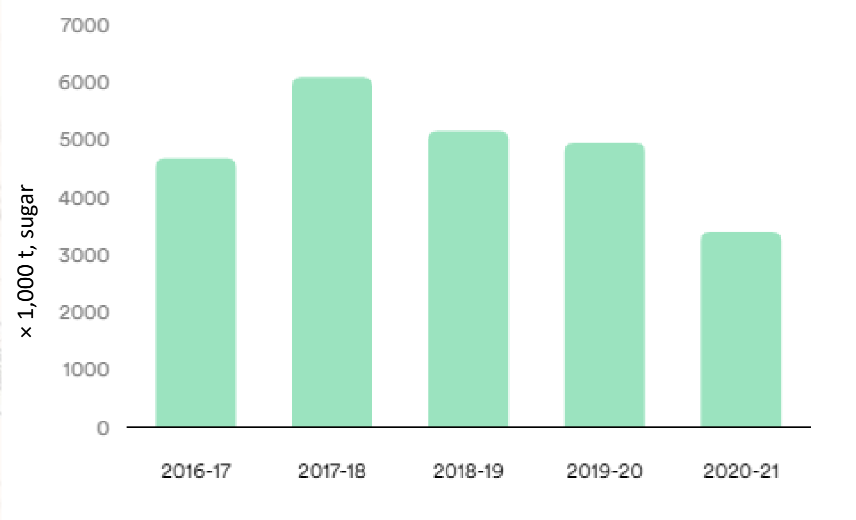
Tereos and CU: 85%



Sugarbeet in France

- Average beet yield: 85 t/ha @16° (2019-20)
- Average sugar content: 17,8 °S (2019-20)
- Average sugar yield: 12,4 t/ha (2019-20)

- Average beet yield: 64,5 t/ha @16° (2020-21)
- Average sugar content: 17,1 °S (2020-21)
- Average sugar yield: 9,4 t/ha (2020-21)



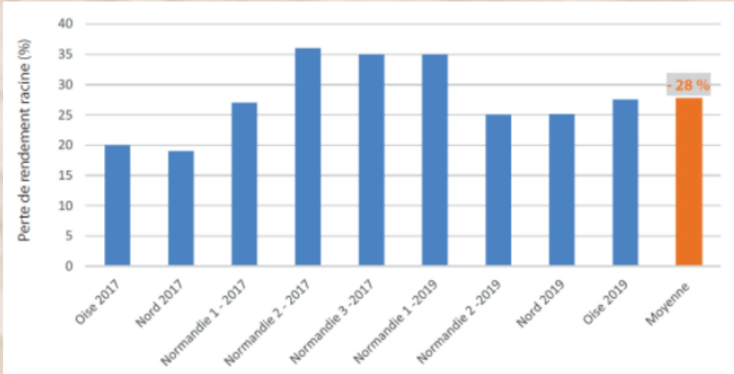
Main challenges for the sector

- ✓ Weather-related (drought, frosts,…) → risk management tools
- ✓ Crop management → further adjustments at farm level
- ✓ Economic → alternative crops, flexibility & reactivity to market signals

Focus on plant protection

About Neonics

→ Widespread beet yellows infections in 2020-21: significant losses



→ No « viable » alternative at this stage

→ For now:

- ❑ derogation allocated on an <u>annual basis</u> and for a maximum period of 3 years
- ❑ Limited validity of the derogation (120 days) : « frost issue » in 2021-22
- ❑ 25% reduction in the neonics amount used for seed coating
- ❑ Restrictions on (N+1) and (N+2) crops allowed on the same plot

ARTB
Association de Recherche Technique Betteravière

Focus on plant protection

About Herbicides & Fungicides

→ Herbicides: 8 active ingredients available in France (but 6 widely used) for « dicot »

Matières actives	Exemple de spécialités	Dose homologuée par cycle cultural	Amarante	Ammi Majus	Atriplex	Chénopode	Colza	Ethuse	Fumeterre	Gaillet	Matricaire	Mercuriale	Morelle	Mouron blanc	P, S, D	Pensée	Ren. oiseaux	Ren. persicaire	Ren. liseron	Ravenelle	Sanve	Véronique fdl
Phenmediphame 160 g/l (PMP)	Fasnet SC, Bettapham ...	6 l/ha																				
Ethofumesate 500 g/l (ETHO)	Tramat F	2 l/ha																				
Métamitrone 70 % (METAM)	Goltix 70UD	4 kg/ha																				
Lénacile 500 g/l (LEN)	Venzar SC[1]	1 l/ha																				
Triflusulfuron méthyl 50 % (TRI)	Safari	0,12 kg/ha																				
Clomazone 360 g/l	Centium 36CS	0,2 l/ha																				
Dimethenamid-P 720 g/l	Isard	1 l/ha																				
S-Metolachlor 960 g/l	Mercantor Gold	0,6 l/ha		-				-													-	

[1] ou Venzar, Varape : lénacile 80 %, 0,624 kg/ha par cycle cultural

Doses conseillées (un seul passage) Mode d'action HRAC[1] : A		Panic, sétaire, digitaire, folle avoine	Vulpin, ray-grass	Chiendent
	Stade des graminées	3 feuilles	3 feuilles / début tallage	
Agil	Propaquizafop 100 g/l	0,3 l/ha		2 l/ha
Etamine - Pilot	Quizalofop-P-ethyl 50 g/l	0,6 l/ha		3 l/ha
Fusilade Max	Fluazifop-P 125 g/l	0,5 l/ha		3 l/ha
Centurion 240 EC - Ogive VXT	Clethodim 240 g/l	0,5 l/ha	0,75 à 1,25 l/ha[2]	1,25 l/ha
Foly R	Clethodim 120 g/l	1 l/ha	1,5 à 2,5 l/ha[2]	2,5 l/ha
Stratos Ultra	Cycloxydim 100 g/l	0,8 l/ha	1 à 2 l/ha[2]	4 l/ha

Famille chimique : FOP Famille chimique : DIM

→ Fungicides: 4 active ingredients / 3 families widely used
+ sulfur
+ copper (by derogation)

Produit	Dose l/ha	Délais avant récolte	Nb max de traitements par an	Délais de rentrée	Zone Non Traitée (ZNT) aquatique
Spyrale [1] (fenpropidine 375 g/l + difénoconazole 100 g/l)	1[1]	28 j	2[1]	24 h	50 m[1] (DVP 20 m)
Zakeo Xtra [2] (azoxystrobine 200 g/l + cyproconazole 80 g/l)	1	35 j	2	48 h	5 m
Timbal EW (tetraconazole 125 g/l)	0,8	14 j	1	6 h	5 m
Amistar Gold (azoxystrobine 125 g/l + difénoconazole 125 g/l)	1	35 j	2	6 h	5 m
Passerelle (difénoconazole 250 g/l)	0,5	21 j	2	24 h	5 m

Triazole - strobilurine - pipéridine

Focus on plant protection

- Private firms having reduced economic incentives to renew marketing authorizations for some of their products (not only herbicides but also insecticides and fungicides)

  → Further reduction in the availability of active ingredients for « economic » reasons

- Competitive crops used to break the proliferation of cereal-specific weeds : maize, potatoes, rapeseed or peas

- Other initiatives could affect beets : possible daily restrictions on the use of insecticides during flowering phases (under the so-called « Plan pollinisateur »)

  → Crop rotations involving rapeseed (19% in N+2) likely to be affected

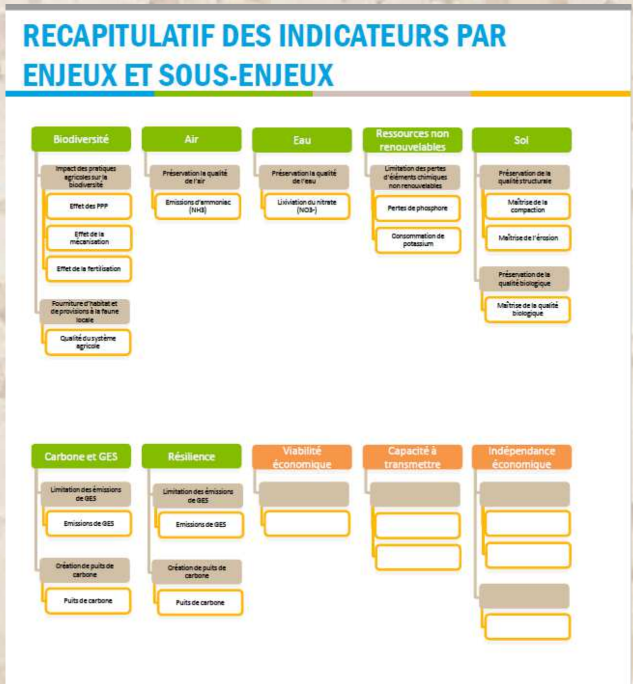
About the PNRI

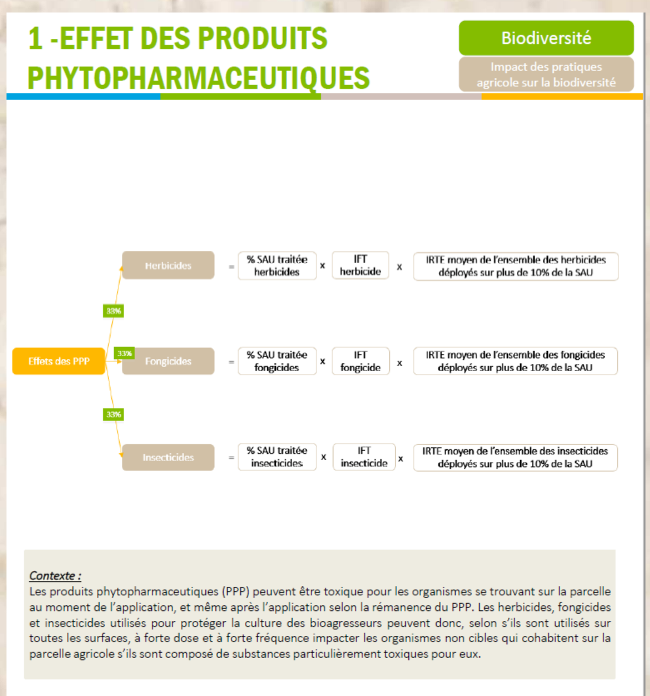
- Private-Public « National Research and Innovation Plan » (PNRI)
- 20 MEUR (13 MEUR private/7 MEUR public) to find alternatives to the use of neonics
- 2 projects in which ARTB is involved to assess the economic viability of technical solutions

Current initiatives

- Investigative and scientific work to quantitatively assess the sustainability of beet and cane crops

→ « Observatory of Sustainability for beet and cane »





Current initiatives

- Current experiments launched to investigate the implementation of an income stabilisation mutual fund for the sector

- Revision of criterias for HEV certification → « HEV2+ » (Eco-scheme) to access the mid-level

- Development of a framework called « Label Bas-Carbone » → additional revenues for farmers thanks to reductions in CO_2 emissions and/or CO_2 sequestration in the soil

- Possible indexation of sugarbeet prices on sugar-driven markets

ARTB
Association de Recherche Technique Betteravière

Conclusion

- ❑ Numerous challenges but sugarbeet will survive

- ❑ How to create additional value for the crop and compensate for a rise in production costs due to various additional constraints

- ❑ How to secure a smooth inter-generational transition as almost ½ of existing farmers will retire in 10 years or so…

ARTB
Association de Recherche Technique Betteravière

THANK YOU

www.artb-france.com

Alexis PATRY
Head of Operations
apatry@artb-france.com

FREE SUBSCRIPTION to our Newsletter