Wheat and maize markets

Who will be the actors of tomorrow ?

With 215 million tonnes traded internationally, the wheat and maize markets have begun to involve new actors in recent years. How are these markets evolving and who are the main players among suppliers and buyers ?

The world wheat trade has increased threefold in 50 years, reaching nearly 120 million tonnes of grain traded.

World cereal production (apart from rice) today represents about 1 700 Mt, of which 85 % is maize and wheat.

During the last decade, the world supply has increased by about 300 Mt but with a lot of variability. For example, production in 2006 was 200 Mt less than in 2008. Consumption (excluding rice) is increasing more linearly by 2% per year. In the last decade, consumption was greater than production in 6 years out of 10. The demand for cereals for animal feed and industrial outlets (including bioethanol in the USA) are the main causes of this increase. Industrial uses (ethanol and starch) have gone from 121 Mt to 207 Mt in 5 years.

The wheat market: few suppliers for a pool of buyers

In spite of the buyers being widely dispersed, a few heavyweight actors dominate. These are for example the Maghreb countries (9-12 Mt), Egypt (7-9 Mt), Brazil (5-8 Mt), the 27 EU countries (5-7 Mt) and Japan (5.5 Mt), without forgetting the countries of the Middle East and South Asia.

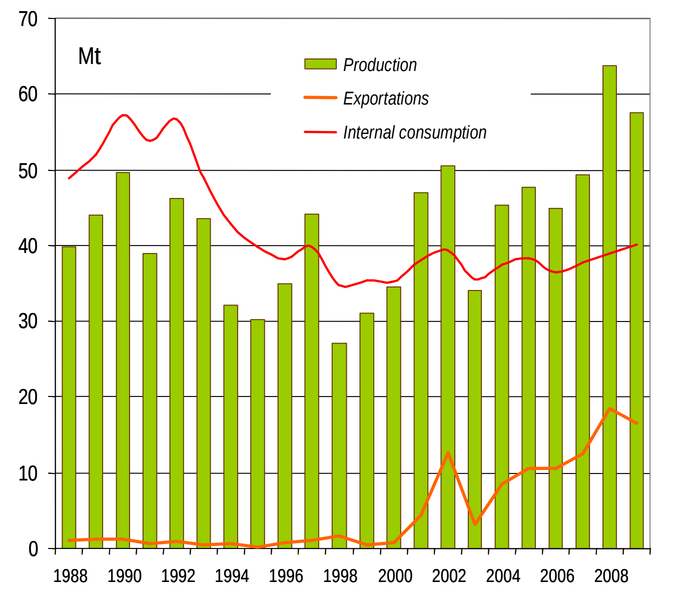
Historically, the market shares of the five big exporters (USA, EU, Canada, Australia and Argentina) represented nearly 90% of the total. But since the beginning of the 2000s, the arrival of the Black Sea countries (Russia, Ukraine, Kazakhstan) has overturned the order *(table 1).* The five traditional exporters have lost 20% of market share in 10 years. This trend however masks great variability.

Table 1 : The wheat supply (including durum wheat) of competitors (mean 2006-2008)

	France	E.U.	Argentina	Australia	Canada	USA	Kasakhstan	Russia	Ukraine	World
Area (Mha)	5.3	25.3	5.2	12.7	9.5	20.7	12.8	25.0	6.2	218
Yields (t/ha)	7.1	5.2	2.7	1.2	2.6	2.8	1.1	2.1	2.9	2.9
Production (Mt)	37	132	14	15	25	58	14	53	18	630
Exportations (Mt)	16*	17**	9	10	18	29	7.5	14	6	124
Export / production	43	13	64	66	73	50	52	26	33	20
Market share (%)	-	14	7.5	8	15	23	6	11	5	-

The wheat trade represent 20 % of the world's production. The USA, Canada and the 27 EU countries are the main suppliers. Russia is gaining market share

The trends in production, consumption and exports of Russian wheat *(figure 1)*



Russia's exports are constantly increasing and this country could become the 2nd world wheat exporter.

Rise to power of Russia; decline of Argentina

The most striking feature of the last three years is the rise to power of Russia *(figure 1)*. Today it is on the way to becoming the 2nd largest wheat exporter in the world.

On the other hand, two years ago Argentina dropped out of the top five exporters. Between 2005 and 2009, the area of Argentinian wheat fell from 5 to 2.9 Mha, to be replaced mainly by soya beans, which are more profitable and politically less risky (market closures, export taxes etc.).

Although maize is the most produced cereal (765Mt), it is not the most traded

Maize: the USA, Argentina and Brazil share 85 % of the market

Asia is the main importer of maize (40% of imports). Japan comes first (16 Mt) followed by Mexico and South Korea (8-9 Mt each). The market is then fragmented, with imports per country of 0.5-1.5 Mt. But the growth is more and more taking place in north Africa, the Middle East and Mexico.

The world market is dominated by the USA, which has 60% of the market share *(table 2)*. Coming next are Argentina and Brazil. These three countries represent 85% of the market. Because of increase in its internal consumption, China, which for a long time has been the second biggest exporting country, is steadily disappearing from the market.

The biggest change comes from Brazil which has passed from the status of an importer to that of the 3rd biggest world exporter. In 10 years, the production of maize has gone from 33 to 53 Mt. This progression is explained by several factors:

- the development of new growing areas (Mato Grosso) ;
- the development of double cropping : thanks to a favourable climate, it is possible, in certain regions, to take two harvests a year on the same field. The main crop is called safra and the second one safrinha (literally « small harvest »). However 70% of the maize crop comes from the safra harvest.
- yield increase.

Table 2 : The supply of maize from competitors (mean 2006-2008)

	France	Hungary	Rumania	E.U.	Argentina	Brazil	Ukraine	USA	World
Area (Mha)	1.6	1.2	2.2	8.6	2.8	14.2	2	31.8	156
Yields (t/ha)	9.1	5.8	2.8	6.3	6.7	3.8	4.1	9.5	4.9
Production (Mt)	14.5	7	6.2	54.5	19	54	8.5	302	765
Exportations (Mt)	5.8*	4.2*	0.8*	1.1	12.5	8.7	2.9	53.5	91
Export production	40*	72*	12	2	65	16	33	18	12
Market share (%)	-	-	-	-	14	11	3	60	-

Today, the maize market is concentrated around the United States, Argentina and Brazil. Only 12 % of the maize produced is traded on the world market.

The French industry is equipped with port facilities for exporting. The port of Rouen is the biggest cereal-exporting port in Europe.

2017: towards a change in the appearance of the markets ?

For the year 2017, the macroeconomic model FAPRI[1] assesses the additional world needs for wheat and maize at 230 Mt, of which 143 Mt are for maize. Animal feeding and industrial uses are driving the demand. Animal production will progress by about 50 Mt, nearly half of which will be in Asia, while the production of biofuels in the USA will require an extra 45-50 Mt of maize.

World trade will increase moderately. For both wheat and maize, European markets have settled down. For wheat, although Brazil and Egypt will still be the main buyers, Africa and the Middle East will be responsible for more than 50% of the increase. For France, this means that the export outlet to third world countries will confirm its importance.

Food and energy objectives

For maize, although the USA keeps the leadership, the appearance of the market risks being altered to make room for other players like the Ukraine, Hungary, Russia and Romania. This new order will depend on the American capacity to produce enough to respond to its internal demand and maintain their exportable fraction. China is able to maintain its self-sufficiency in wheat, even in maize, but will have to import more and more soya. This is an important parameter as maize and soya beans are grown on the same areas. Both crops are in competition for land use: the demand for soya beans from China might favour the seeding of it instead of maize.

Apart from the basics, the price of cereals will depend more and more on external factors like the price of oil, financial markets and political decisions (concerning commerce, the environment and energy).

There is also a change in appearance to cope with and over which, unfortunately, the growers have no control.

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[1] *American macro-economic model.*