

AGRICULTURAL PRODUCTS IN THE INTERNATIONAL TRADE

CORN

Grain of corn:
Basic food.... Exchange money...

The history of corn grain is closely related to the history of humanity. Since the ancient period, corn is the base of alimentation due to its high nutritive value. 3 millions years back, human being were nomads; they hunted and collected fruits to ensure their food. Nomadism progressively changed into sedentary which allowed cultivation of cereals. In the Neolithic period (8000 years before JC) corn was a product of cropping, consumed as non cooked or cooked. 3000 years before JC that the first process of bread making has been elaborated by the Egyptians: this was the first cake made by corn.

Man at that time was able to produce his own food. At the same time he acquired his self-food sufficiency and the first commercial exchanges started. Following the exchanges, the process of bread making were ameliorated, thanks to the Hebrews, the Greeks and finally the Romans. They spread its use all over Europe. In this way corn in its various forms (bread, couscous, semolina, biscuits, pasta, etc.) becomes the main food in the occidental civilisation.

1. Comprehension of the situations

a) The production

- **Repartition:** countries or group of countries in %, global data's on the world cereals market in millions of tons

	2002-2003		2003-2004	
	Value	%	Value	%
Europe	134,8	23,8%	114	20,5%
Ex –URSS	69,1	16,9%	61,5	11,1%
North & Central America	62,8	11%	90,3	16,3%
South America	18,5	3,2%	23,5	4,2 %
Near East	37,7	6,6%	38,9	7 %
Extreme Orient (including India and China)	186,9	33 %	179	32,3 %
Africa	17,3	3%	21,5	3,8 %
Oceania	10,4	1,8%	25,2	4,5 %

(Source: International Cereals Council)

- **Volume produced**

	2002-2003	2003-2004
Production in millions of tons	566	554

(Source: International Cereals Council)

- **Rendering**

At the world level, the amelioration of the cultural technology and the genetic selection of the seeds have lead to a considerable growing of the rendering, coming from less than 10 q/ha (q= 100 kg) in 1900 to more than 25 q/ha in 1990.

Countries of South America remain stable with an average of 20q/ha, Africa and Near East region with 10q/ha, Egypt and Saudi Arabia reaching 35 to 40q/ha in irrigated land.

In Europe, high renderings were obtained in intensive agriculture. The average rendering has grown up from 30 q/ha to 60 q/ha during the last 30 years; which represents an average progression of 1 quintal per year per ha. In France, the benefits are remarkable. Today, the production is up to 80 to 100 quintals per hectare for the most industrialised farms.

The augmentation of the rendering and of the cultivated surfaces thus leads to a strong growth of the production that reached 275 millions tons in 1965 to 600 millions tons in 2003.

Corn is the first cereal in the exchanges (45% of the exchanges in 1998)

b) The Consumption

World consumption in quantity

	2002- 2003	2003-2004
Consumption (millions tons)	600	592
Final Stock	164	126 (corresponding to 100 days of consumption)

(Source: International Cereal Council)

Since 1960, consumption has also increased in quantity in Asia and in quality in Europe. In the developing countries, the annual consumption per head was notably progressed from 1905 to 1985: in Near Orient from 181 to 248kg, in North Africa from 131 to 204 kg, in Sub-Saharan Africa from 8 to 16 kg.

The case of Africa is particular: the consumption of corn is slower than in other countries. Even not known in the country side (Senegal 2 to 3 kg per year/per head), bread represents a weak urban demand (Dakar: 33 kg per year/per head; Abidjan: 8 kg/per year/per head).

We have also to notice for the African continent, the risk in the food habits by importation of corn flour, at the detriment of the local food crop production.

We have seen a slow increase in the industrialised countries: consumption is nowadays around 240 kg per year/per head, and previsions for Europe are stable. At the contrary, African demand and mainly Asian demand seems to be in augmentation. Today, a Japanese eats 30 kg of corn per year for 78 Kg of rice and a Chinese from the North eats from 140 to 150 kg. In 1960, industrialised countries consumed 63 % of the world production; in 2000 those data's have changed, as Africa and Asia consume 60% of the production.

c) The World trade

As for the importations, buyers are numerous with a quite important proportion of developing countries. Following WB data's they represent nearly 2/3 of the total of importations.

In spite of this dispersion, some actors are dominating: Brazil, first world importing country as well as some Asian countries like Indonesia, South Korea and Japan. China was the first world importing country in the 90's with 40 million tons per year, which comes 14% of the world trade. Today, China has reached an equilibrium and import only 0,4 million tons per year which represent 0,37%.

North Africa and one part of East Asia have increased the volume of their cereal's importations. But in the second part of the 90's the increase of importation has get slow down, mainly because of lack of oil resources, that has forced them to reduce their demand.

In Sub Saharian Africa, importations have also been reduced by the end of the 90's in spite of an increasing demand. For many countries of the region, food aid represents an important part of the local importations...

- Importation

2002	Millions of tons	%
World	105,3	100 %
Europe	14,7	14 %
North and Central America	7,5	7,12 %
South America	11,3	10,73 %
Near Orient	11,6	11 %
Extreme Orient	25,3	24 %
Africa	29,1	27,63 %
Oceania	0,9	0,85 %

(source: International Cereals Council)

- **Exportation**

9 big exporters controls nearly 90% of world corn trade: USA (22% of the exchanges), Canada (8%), European Union with 15 countries (15%), Ex- URSS (Russia, Ukraine, Kazakhstan) (24%) for Northern hemisphere and Australia (11%), Argentina (6%) and India (5%) for Southern hemisphere. Inside European Union, French position for export is dominant. Its part on the world market is about 9%.

Year 2002	Millions of tons	Percentages
World	105,3	100 %
United States of America	23,2	22,03 %
European Union	15,5	14,71 %
Russia	13	12,34 %
Australia	10,9	10,35 %
Canada	8,6	8,16 %
Ukraine	6,7	6,36 %
Argentina	6,1	5,79 %
Kazakhstan	5,6	5,31 %
India	5,4	5,12 %
Turkey	0,8	0,75 %
Rest of the world	9,5	9,02 %

(source: International Cereals Council)

The countries commercialise only their surplus of production, which influence the world price, the surplus being different every year. Prices are thus fixed for only 20% of the world production. Those 20% represent the real market which is also influenced by the term market. Actually the reference price is the price of the American corn "Soft Red Winter (SRW), provided in Mexican gulf, and which gets its value in the Chicago Board of Trade. This is the world corn term market. There are other term markets (about 20) or trade bourses all over the world which represent more or less 70 basic agricultural, energetic or mine products.

2. Analysis of the mechanisms

a) Term market of Chicago

Term market of Chicago, actually is not exchanging physical quantities of corn but only papers representing contracts in between buyers and sellers. The activity of this term market is as financial as bourses of value as only 2 to 5 % of the contracts really give reality to physical corn exchange. This market, even if it's mainly financial market, interest the real world corn trade as it's base its price on the term market values.

The term market allows as well to ensuring against important fluctuations of the values as the transition volumes represent the real evolution of the world market. The values daily established are controlled by the market authorities which gives it some transparency.

Term market of Chicago limits the risks generated by the international trade, as trade and speculation are complementary on this market. More you can find speculators ready to assume the risks, more easy traders will find the necessary cover for the commercial operations. In the same mechanism, more the needs of the traders are important more perspectives of financial benefit are present. The term market of Chicago is thus essential for the international corn trade. But this kind of market is mainly the part of the prerogative of big industrialised countries.

Term markets are the main indicators on which buyers and sellers are looking for the trading of their agricultural products for their international transactions.

b) Influence of the agricultural policies

But this market has also its limits and is more and more contested. Term market of Chicago is no more the reliable indicator of a world price, because the notion of one unique world price is nowadays contested. Actually people use to refer now to the price of Mexican Gulf, price of Argentina and price departure from Rouen. Each price corresponds to an origin and particular quality.

We can thus say that the prices are no more constituted with the offer and demand because support to exportation is influencing this rapport. This is mainly due to the agricultural policies of each country.

c) TNC, Trans-national Companies

Another factor can also change this way of determining the prices, since 90% of the corn world exchanges are in the hands of 5 companies (Continental Grain, Louis Dreyfus, André, Cargill, Bunge y Born). They have a real weight as they arrive to maintain the prices, practising in between the agreements and competition so that they influence in determining the world prices.

World prices are thus not only formed by offer and demand but also by many other factors we have just described. Actually the political interventions of each country falsify the prices and don't allow the values to play their director role for the establishment of the corn prices.

All those factors can partly explain the fluctuations of the world prices. The world value fluctuates with regard to the offer and demand, thus to stocks, policies and markets.

d) Influence of the stocks

The level of stocks made the prices increase or fall down, as the weakness of the cereal stocks has a tendency to increase the price fluctuations year by year.

The level of the stocks depends on, in between other factors:

- The consumption: for example in between 1992 and 1995, consumption was higher than the production and has a consequence, i.e. a strong withdrawal of the world stocks
- The climatic accidents: as for example the floods of 1993 in USA, the dryness in Australia in 1994, the very bad meteorological conditions in America in 1995, the dryness in Europe in 2003
- The agricultural policies: aiming to reduce the costs by the control of the production. This is the case in Europe with the setting of an obligatory freezing;
- The substitutions of cereals and cultures more benefiting as culture of oleaginous.

The ratio stock in percentage of consumption is a good indicator of the “temperature” of the market. It should not be below the FAO norm fixed up to 17%. In 2003-2004, the rapport was of 21,3% . Stocks are playing a role of shock absorber.

3. Perspectives for the future

In the message for the World Food Day 2005, the Director General of the FAO, recalls the contribution of diverse cultures to the world agriculture and stands that sincere intercultural dialogue is a preliminary condition to any progress in the fight against hunger and degradation of the environment.

(Declaration of FIMARC and MIJARC of the World Food Day 2005).

a) Human rights

The FIMARC recalls that the right to food, constitutive of food sovereignty, is written since 1993 in the economic, social and cultural rights. The respect of this right and its application are indispensable conditions to reach the objective of 50% reduction of the number of sub-alimented people in 2015. The intercultural dialogue, that is the richness of the exchanges, can surely help to reach those objectives and make more confident in our mission to promote and accentuate them.

b) Towards solidarity economy

To attain solidarity economy we want to promote and develop an alternative research, which will improve the soil and cultivating practices. Same time we want to safeguard the traditional seeds adapted to the soils and climates of the different regions. Also we insist to promote family based agriculture for quality production. It necessitates a real agrarian reform in numerous countries to guarantee an access to land for all.

c) Food sovereignty

We recognize the value of the exchanges, whether from a human point of view or in the exchanges of "good practices" in agriculture. Nevertheless we insist on the security principle in this exchange of practices when M. the Director General in his speech refers to "...exchanges between experts who are showing techniques elaborated in laboratory...". We reminded in 2004, the potential danger of the utilisation of GMO's which are contaminating traditional plants, without any master of the consequences, which are also an important cause of the potential reduction of the genetic diversity and that lead to the loose of autonomy of several small farmers.

Nowadays we have to notice that when we heard speaking of exchanges in agriculture, those are actually commercial exchanges. Those exchanges and their regulations are of course necessary in the actual global context but, the way they are regulated is not leading to the reduction of the debt in the poor countries, neither to the Millenium Development Goals which aim to reduce poverty by 50% till 2015. We regret that, on one hand FAO mobilises to better the living conditions of developing countries, and on the other hand to see the representatives of those countries, during the World Ministerial in Hong Kong adopting policies which very often are against those wishes.