

Égalité

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GRAINS MARKET ANALYSIS AND COMMODITY BALANCES AS TOOLS FOR FORECASTING AND FOOD SECURITY

23 September 2021

Introduction

Objectives:

- to provide the sectors with knowledge of supply, demand and price trends in the major regions of the world in order to assist in decision-making and support the analyses of economic operators and public authorities:
 - on a neutral and robust basis
 - in a shared manner: valorisation and dissemination.
- How, which methods and which sources, which valuations?

Content:

- I. Monitoring international markets (characteristics, methods, illustration)
- II. Building forecast balances (objectives, principles, prerequisites, example)
 - Definition and objectives of a forecast balance sheet
 - · Building a forecast balance sheet
 - Knowledge for elaborating a balance sheet: developing national and international expertise
 - Collecting and compiling statistical data: contrasting situations in the Mediterranean region

CIHEAM & MED-Amin network

CIHEAM

- •Intergovernmental organisation of 13 Mediterranean countries
- High level education, research and cooperation
- •In agriculture, rural development, sustainable food systems





MED-Amin

- Network of the 13 CIHEAM countries (FPs, SRPs)
- •Improve information sharing and ag. market transparency to prevent crises
- Launched in 2014 at Ministerial level
- Collaboration with FAO/AMIS and EC
- Coordinated by CIHEAM Montpellier
- Partnerships (e.g. IGC)

I. Monitoring International Markets

A multidimensional approach to grain market analysis

→ Integration of the macroeconomic and geopolitical environment in the analyses

Currency: EUR/USD parities (short-term and long-term).

On international markets largely invoiced in USD, the importance of parities:

- for the **price competitiveness of cereal exporters**: Russia, Ukraine, EU, USA, Canada, Argentina, Australia, Brazil...
- for the purchasing power of importers.

Monitoring that takes into account the evolution of monetary and budgetary policies as necessary: ECB, FED... impact on interest rates and economic growth.

→ Focus on fighting inflation or supporting growth?

The macroeconomic context: economic growth, facts to report (e.g. Covid-19 shock). In 2020, specific monitoring of the growth prospects of the major institutions (IMF, OECD, World Bank, etc.)

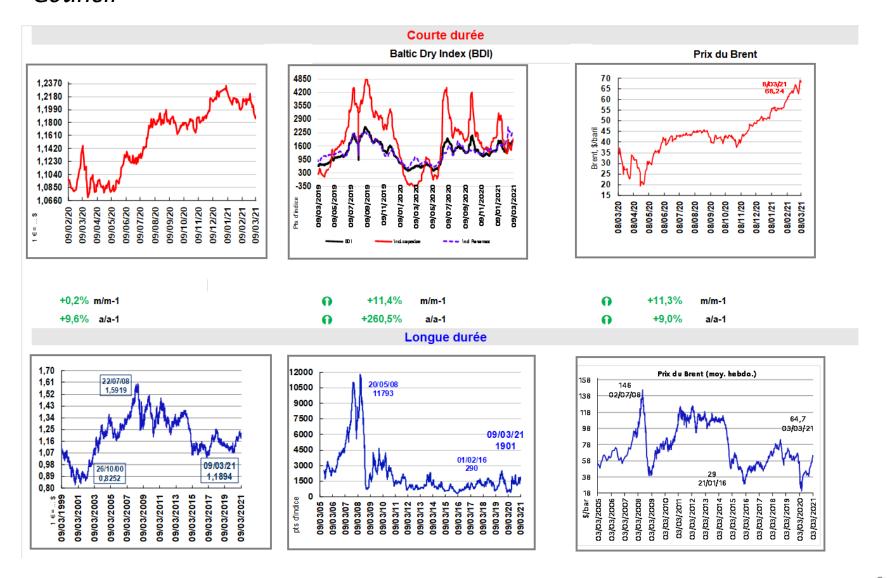
Energy markets, influencing agricultural commodity prices → monitoring oil prices, Brent, monitoring ethanol prices, monitoring OPEC/OPEC+ meetings

Sea freight markets: monitoring of freight price indices (Baltic Dry Index declined in Capesize and Panamax)

Climatic conditions and crop monitoring

A look at futures markets, in particular the positions of non-commercial investment funds of a speculative nature

Example: macro-economic indicators presented at a "Cereals Specialised Council"



Domestic policies affect commodity markets

Domestic policies that restrict exports are becoming more common in crisis situations.

→ Some recent examples on grains:

RUSSIA:

- Grain export quota for wheat, rye, barley and maize of 17.5 Mt from 15 February to 30 June.
- Wheat export tax: €25/t (\$30) in the quota from 15 February, increased to €50 from 1 March to 30 June. Above the quota, the tax increases to 50% of the customs price, with a minimum of €100/t.
- Export tax on barley and maize of €10/t and €25/t respectively from 15 March to 30 June.
- For 2021/22: floating tax on wheat exports based on a proposal under discussion
- Regulation of domestic prices of "socially important products" bread and other basic foodstuffs for 90 days if their increase over 2 months exceeds 10%, excluding seasonal factors.
- **Sunflower** oil: agreement with Russian sugar and sunflower oil producers on price cuts with distribution until end of March 2021.
- UKRAINE: wheat exports capped at 17.2 Mt in 20/21 and 24 Mt in maize (MoU)
- **ROMANIA**: Concerns in the autumn about the ultimately unsuccessful possibility of a default clause on 2020/21 deliveries due to the historic drought. Abandoned project of export tax 04/2020.

→ On Palm Oil:

- INDONESIA: progressive export tax of \$55 to \$255/t CPO, depending on price levels, to generate funds for its palm biodiesel programme.
- MALAYSIA: raised CPO export tax from January to 8% (normal system, coupled with the level of international prices).

Geopolitics affect commodity markets

Geopolitical tensions influence supply, demand and prices Examples:

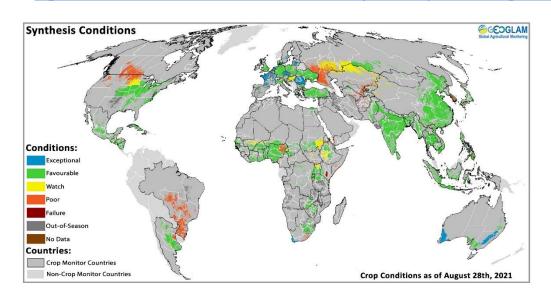
- Trade and political tensions China/USA, China/Australia, China/Canada, USA/EU, etc. → Follow-up of the implementation of the "Phase 1" agreement of 15/01/2020 between China and the US and impact on world grain supply and demand.
- The offensive use of taxes and customs duties: China/Australia (85% on Australian barley)
- Tensions around oil/gas regions: e.g. Eastern Mediterranean, Persian Gulf countries, Russia/Ukraine, Nord Stream 2 pipeline route... For example, the recent drone attack on Saudi Arabian facilities immediately pushed up the price of Brent.
- Political upheaval
- Impacts of extraterritorial legislation, particularly from the US, on trade
- Economic embargoes
- Geopolitics and logistics: the "New Silk Roads" strategy as a vehicle for China's economic power

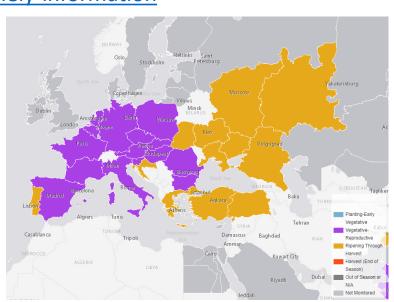
Agromet and crop conditions affect commodity markets

Market monitoring requires regular monitoring of weather and crop conditions.

→ Different sources:

- The **GEOGLAM** (GEO Global Agricultural Monitoring) initiative, launched by the G20 in 2011, in conjunction with the creation of AMIS. Led by a team of researchers from the University of Maryland and in partnership with NASA for the crop observation satellite network.
- Since 2013, GEOGLAM has been providing AMIS with a global overview of field crops in the G20 countries and 7 other producer/exporter countries, which is published every month https://cropmonitor.org/
- With Céré'Obs, FranceAgriMer contributes for France to crop monitoring carried out by AMIS
- For more information: https://nasaharvest.org/index.php/news/geoglam-crop-monitor-agricultural-market-information-system-providing-timely-information





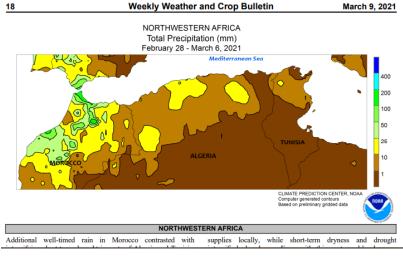
Agromet and crop conditions

Public information sources:

- USDA / US: USDA Crop Progress Report, Drought Report https://www.usda.gov/sites/default/files/documents/AgInDrought.pdf
- Weekly weather & Crop Bulletin (US and World): https://downloads.usda.library.cornell.edu/usda-esmis/files/cj82k728n/3b592422r/xw42p369d/wwcb1021.pdf
 1.pdf
- World Meteorological Organization (UN agency), including El Niño/La Niña monitoring: https://public.wmo.int/en/media/press-release/la-ni%C3%B1a-has-peaked-impacts-continue
- European Union: JRC MARS (Monitoring Agricultural Systems) publishes a detailed monthly weather and crop report for Europe and the Mediterranean: https://ec.europa.eu/jrc/en/mars/bulletins

Private sources:

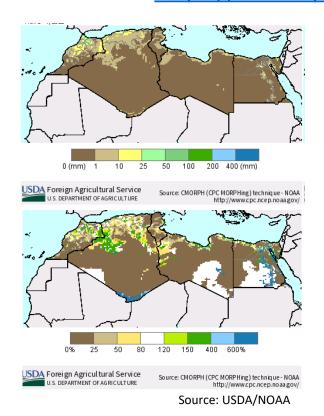
- Black Sea area: UkrAgroConsult subscription <u>https://ukragroconsult.com/en/</u>
- South America: http://soybeansandcorn.com
- Visio Crop, other models (social networks)...

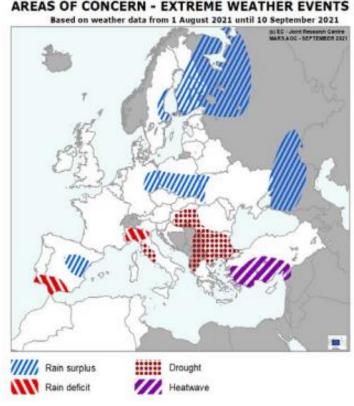




Agromet and crop conditions mapping

- JRC MARS for Europe (https://ec.europa.eu/jrc/en/mars/bulletins)
- Crop Explorer USDA <u>https://ipad.fas.usda.gov/cropexplorer/Default.aspx</u>
- NASA https://nasagrace.unl.edu
- NOAA https://www.cpc.ncep.noaa.gov US climate forecasts





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Market monitoring: supply, demand, price, international trade from relevant regions

1. Public sources of international information, macroeconomic environment: World Bank, OECD, IMF

For example Outlook 2021 on https://www.banquemondiale.org/fr/publication/global-economic-prospects

OECD: https://www.oecd.org/fr/france/

2. IGC reports, databases, meetings

Members' area of the website https://www.igc.int/en/members-site/igc_members-home.aspx

- Daily monitoring of markets and prices in cereals, oilseeds, freight prices, currency monitoring
- Access to downloadable databases on prices, currencies, markets, exchanges etc...
- Weekly publications of indicators
- Monthly reference reports

3. USDA: Reports and sources

- Global Reports: https://www.usda.gov/oce/commodity/wasde
- Grain Reports: https://downloads.usda.library.cornell.edu/usda-esmis/files/zs25x844t/kh04fh27x/4b29c186z/grain.pdf
- Oilseed Reports: https://downloads.usda.library.cornell.edu/usda-esmis/files/tx31qh68h/hq37wq66q/q237jm44p/oilseeds.pdf
- PSD Online database: construction of customised reports per country up to balance sheets, all countries, all products: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery
- Reports from US agricultural attachés in office: https://gain.fas.usda.gov/#/search



Market monitoring: supply, demand, price, international trade from relevant regions

4. FAO / AMIS releases, events

- FAO Statistics Database http://www.fao.org/economic/est/statistical-data/en/
- AMIS Market Monitor: http://www.amis-outlook.org/amis-monitoring/monthly-report/en/#.YE8riGhKjDe

The monthly report includes detailed analyses of fertilizers markets, oil markets, futures markets, comparative analyses of AMIS, USDA, IGC, etc.

5. National Agencies:

- ABARES (Australia https://www.agriculture.gov.au/abares)
- CONAB (Brazil https://www.conab.gov.br/)

6. Private Sources:

- REUTERS and associated services (monitoring of vessels: Reuters/Refinitiv)
- Agri Census Daily: Ag. Information Agency https://www.agricensus.com/
- IHS Markit: Monitoring on environment, markets, all commodities https://ihsmarkit.com/index.html
- Black Sea: UkrAgroConsult consultancy from Kiev. Comprehensive and high quality analyses on supply/demand/price, climatic and growing conditions in the Black Sea region. Events e.g. "Black Sea Grains Conference". https://ukragroconsult.com/en/
- **South America**: Soybean & Corn Report → monitoring of growing conditions, production, markets, trade of soybean and maize in Brazil and Argentina http://soybeansandcorn.com/
- BAGE, Bolsas de Cereales (Argentina https://www.bolsadecereales.com/)

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Trade

Specific monitoring of purchases/evolutions in the main cereals buying countries/regions of the world:

- China, Russia, US
- Maghreb: Algeria, Morocco, Tunisia,
- Middle East countries: Egypt ...
- Sub-Saharan Africa
- Indonesia, Australia, Argentina, Brazil, Ukraine (cf. webinar of May 2021 with IGC)
- → Monitoring of tenders (specialized sites, social network influencers, consultants...)

Some sources of information:

- Tallage / Stratégie Grains
- IGC
- USDA
- Reuters / Refinitiv
- Other

Trade

Trade Data Monitor (TDM): External trade database https://tradedatamonitor.com/index.php#features-wrapper

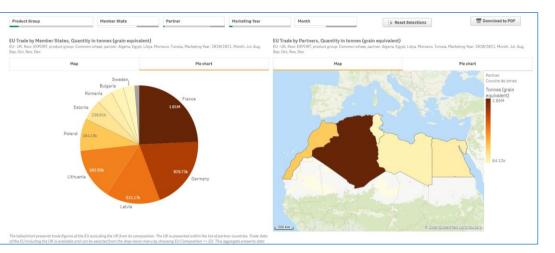
PSD Online (USDA): https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery
Free access tool

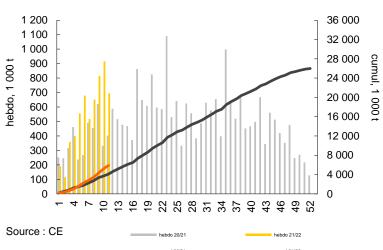
ITC Trade Map - Statistiques du commerce pour le développement international des entreprises https://www.trademap.org/Index.aspx

UN Comtrade | International Trade Statistics Database https://comtrade.un.org/

EU: EUROSTAT, data monitoring TAXUD of European Commission

EU Agricultural Observatories: https://ec.europa.eu/info/food-farming-fisheries/farming/facts-and-figures/markets/overviews/market-observatories_fr





Information on the current situation and market monitoring

REUTERS: qualitative information, news, prices monitoring

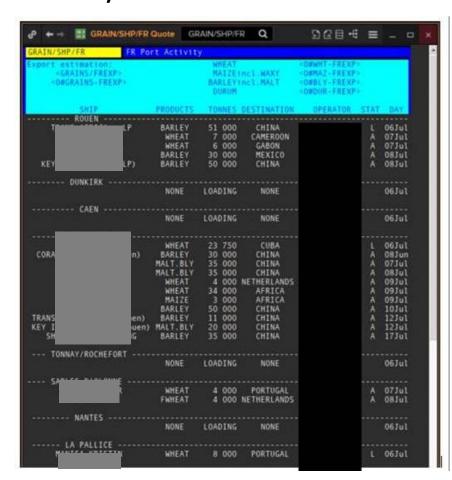
- Monitoring of vessels line-ups:
 Reuters/Refinitiv basic monitoring by
 FranceAgriMer of shipments from French ports
- Cross-sector information through monitoring of the sugar and oilseed markets

Prices Monitoring

- Monitoring prices on the futures markets: Euronext Wheat, Canola, CBOT in US, CoT reports
- International quotations: IGC, EU & France
- Monitoring of freight prices: IGC data

Information watch on EU/World logistics conditions: e.g. strikes, bottlenecks, particularly in Latin America, climatic accidents (Mississippi, Rhine, Danube, etc.)

→ Example: Monitoring vessels itineraries REFINITIV/REUTERS



How are these data and analyses taken into account?

→ Elaboration of a synthetic situation of the World/EU markets (dashboard)

A monthly presentation of the market situation:

- World: see above, methodology, sources
- **EU:** based on trade data and documents drawn up by the European Commission and presented to the monthly "Committee for arable crops monitoring".
- National: by monitoring trade and drawing up S&D forecasts at a dedicated meeting

In France, the synthetic situation is presented every month to the "Specialised Council for Arable Crops and Cereal Markets" (CSGC) (FranceAgriMer):

- Composed of representatives of the State and professional federations (production, trade, exchange, processing, distribution) and chaired by a farmer
- Comments on and discusses the market situation, validates forecasts and discusses all subjects within its remit.
- CSGC news on: https://www.franceagrimer.fr/filiere-grandes-cultures/Actualites-nouvelle-gouvernance

II. Building Forecast Balances

Definition and Objectives of a Forecast Balance

It is a tool for aggregating a certain amount of information on grain volumes (production, trade, uses, etc.), the scope of which is limited geographically and temporally.

Objectives:

- To inform private operators and public services
- To guarantee transparency
- To reduce market uncertainties and therefore price volatility
- To support public policies elaboration and private actors' strategies
- To increase food security
- To optimise flows and thus gain in competitiveness

Forecast Balance Building

Geo scope: national / Frequency: period (NMY) ? / Units: weight, currency, etc. / Commodities: Grain + products of 1st transformation (+2nd transfo) ?

National supply:

- **Production** (can be broken down into different agregates, e.g.: collected + on-farm consumption)

Data needed: Areas x Crop Conditions (Yields)

- Initial stock (=> Final Inventory of NMY-1)
- Imports

National demand:

- Domestic Utilizations:
 - Food
 - Feed
 - Industrial Uses (e.g.: biofuels, biomaterials)
 - Other Uses (losses, seeds, etc.)
- Exports
- Final Stocks (=> quantity available not consummed)

Unit(s) Année N / année N+1	N-1	N	N	Var / N-1
		M-1	М	%
Production (A)		:		
Stock initial (B)				
Importations (C)				
Total disponible (A+B+C)				
Utilisations domestiques (D)				
Alimentation humaine				
Alimentation animale				
Utilisation industrielle				
Autres utilisations Exportations grains (E)				
Total utilisé (D+E)				
Stock final (A+B+C-D-E)				

=> The balance is never complete

Need of national and international expertise

Knowledge of the macro/international context:



- Monitoring of international markets is a prerequisite for drawing up forecast national balance sheets
- Anticipation of international supply and demand, by analysing the factors influencing price variations, supply & demand

Knowledge of the domestic market (national scale):

- Knowledge of the sectors (capacities in logistics, processing, storage, export/trade, identification of key-operators, etc.)
- Knowledge of the factors influencing grains prices at national level
- Knowledge of national S&D characteristics (production, production quality, primary and secondary processing capacity, available stocks, etc.) and its drivers
- Knowledge of the links between national and international markets (geopolitical issues, historical partners, competitiveness, etc.).
- → The expertise is built on figures (historical balance sheets, surface areas, etc.)

Agricultural data collection and Statistics in the Med

The collection/recovery of data from professionals depends on:

- The regulatory context in force in the country
- The organization and governance of the sectors (as well as the relations established between the operators in the sectors public services, collectors, traders, processing industries, etc.)

I. Different regulatory contexts in the Med area

		Reporting of data (origin and mechanism)					
Country	Compulsory ?	Stocks	Production / Collect	Trade	Processing and utilizations	Platform of public access to data	Comments
France	Y	FranceAgriMer (Inventories declared by collectors)	A/Y/P/Pr <-FranceAgriMer (yields based on crop conditions) + SPP (production through surveys) released on Agreste	FranceAgriMer estimates built on expertise from FranceExportCéréales, traders. Depend on current domestic and CFR prices	Private sector (main operators). Importance of feed processing	https://agreste.agri culture.gouv.fr/agre ste-web, Céré'Obs	Obligation to report data to on collection, utilizations and trade to MoA (FranceAgriMer). These operator are involved in the Specialized Grain Council who validate cereal balances on a monthly basis. EU Reg. 2017/1185
Lebanon	N	МоЕ	MoA, Office Cereals and Sugar Beet	Customs, MoE	Private sector (main operators)		No obligation of reporting. Data flow and collection not centralized, integrated, institutionalized between ministries and with private sector. Estimates with big differences depending on sources, not really reliable. Official estimates come from Dept of Stats of MoA. Most reliable data come from private sector (big farmers, traders)
Tunisia	N	limités aux silos OC, mais lien avec Sociétés Mutuelles	DGPA (MoA) pour production; OC pour collecte, en lien avec Sociétés Mutuelles	INS + OC	OC (ventes vers opérateurs pour Food et Feed)	OC, ONAGRI (www.agridata.tn , agrinet), INS	No obligation of reporting.
Turkey	N	TMO (for public facilities) + private sector administrative data	MoA + TurkStat surveys and administrative registers from province/district to national level	TurkStat data (from National trade information system) + Union of Chambers and Commodity Exchanges of Turkey	TurkStat surveys at Industry sector – feed sector administrative data + TurkStat food surveys	Statistical Data Network, (data.tuik.gov.tr/ & https://biruni.tuik.g ov.tr/medas/	According to TURKSTAT law, sector or state organizations have to respond to surveys and administrative registration requests. TurkStat responsible for analysis and publication of data, joint task with MoAF (compilation at district level). Data based on administrative registers (sector or state organization data, subsidies records, etc) and surveys. Validation of the "Agricultural Products Estimation Committee" consisting of 11-institutions (interpro). TMO intervienes on public storage facilities, national food security and price balance.

Agricultural data collection and Statistics in the Med
II. Organization and governance of the grains sector vary in the Mediterranean region

Public

authority

purchase

private

OAIC, 95%

volume SW

GASC, 70%

volume

private

private

private

private

private

private

private

private

OC, 1%

volume

TMO, 10%

volume

Albania

Algeria

Egypt

France

Italy

Greece

Lebanon

Malta

Morocco

Portugal

Spain

Tunisia

Turkey

Interprofession

organized?

Υ

Υ

Υ

Υ

Υ

Υ

Dialogue

(regular) with

private/public

bodies?

Υ

Υ

Υ

Υ

Υ

Υ

councils

crisis

FIAC

Comments

Inter-professional national cereals Council

created in 2018, linked to provincial interpro

'Specialized Grain Council" meet every month

of many operators, e.g. durum wheat/pasta

Greek Rice Millers and Cooperatives

Joint committee of cereals that gather

Complex organization of inter-profession because

Interprofession organized like the Association of

public/private. Not operating during the current

Monitoring Committee of the Cereals National

Strategy (private/public alliance) meet twice a year

Dialogue organized by MoA at least twice a year

OC en contact permanent avec les acteurs privés

representative, etc + board of directors, a research

board, and a holding board) meeting once a year

and "Agricultural Products Estimation Committee"

consisting of 11 institutions

de la filière (ex. collecteurs, transformateurs)

"National Cereals Council" (producers, industrialists, cooperatives, ministry

Authorities

producing statistics

on grains

dept of Stats (MoA)

FAM / SSP (MoA)

ISMEA

Hellenic Statistical

Authority, OPEKEPE

CAP payment authority

dept of Stats (MoA)

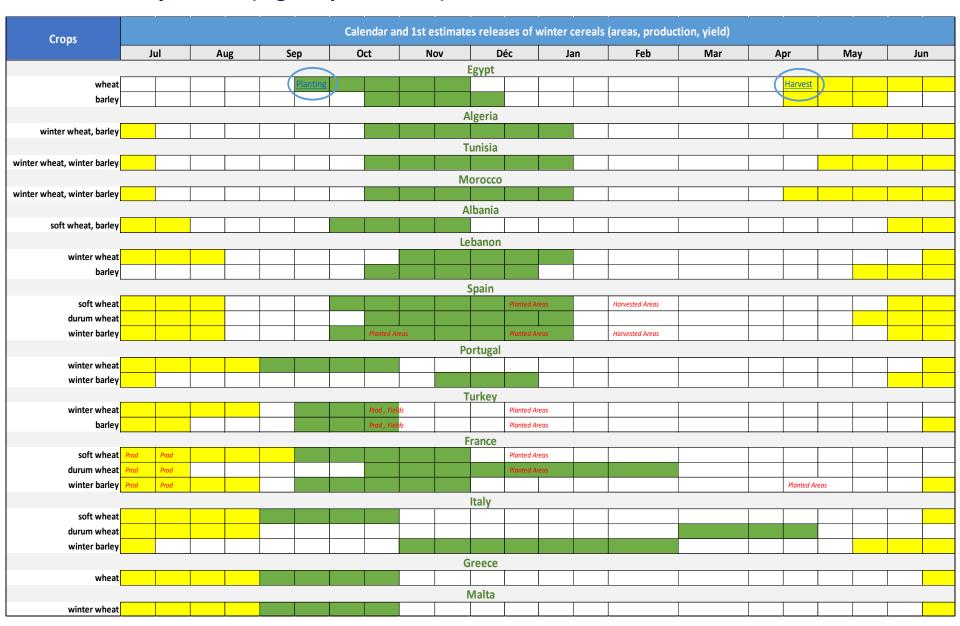
GPP (MoA)

DGPA et ONAGRI (MoA)

TurkStat / MoA

Agricultural data collection and Statistics in the Med

III. Accessibility to data (e.g. on production)



Forecast Balance

France's case

Forecast Balances: monitoring tool of the availabilities and utilizations of cereals in France

On the basis of **declared** collection data and utilization data from agrifood companies and customs. and in consultation with **experts** in the French cereal sector, FranceAgriMer draws up and publishes S&D balances from beg. July particularly for common wheat, durum wheat and barley for the N/N+1 NMY.

The balances are published after they have been validated by the FranceAgriMer Specialised Council (CSGC), which brings together producers, exporters and processors.

These balances are revised monthly (except August).

	Bila	n frar	nçais d	du blé	tendi	re
	En 1000 t juillet - juin	2019/20	2020/21	2021/22	2021/22	Var R2021/R2020
			Prov. Sept- 21	Prév. Juil- 21	Prév. Sept- 21	%
A	Production	39 551	29 176	37 097	36 064	24%
Availabilities for	Stock initial	2 670	3 028	2 650	2 341	-23%
the market (not	Collecte	36 518	27 263	34 194	33 310	22%
considering self-	Importations	232	208	200	200	-4%
consumption and	Total disponible	39 464	30 543	37 094	35 902	18%
on-farm storage)	Utilisations domestiques	15 190	14 319	15 282	15 073	5%
	Panification	2 681	2 709	2 700	2 700	0%
Utilizations by	Biscott., biscuit. et pâtisseries indus.	1 150	1 135	1 130	1 130	0%
the French domestic market	Amido/Glut	2 606	2 608	2 600	2 600	0%
aomestic market	Alcool (y.c. bicarburants)	1 520	1 600	1 600	1 600	0%
	FAB	4 959	4 543	5 400	5 200	14%
	Autres	981	553	600	600	8%
Exports (grains &	Exportations grains	20 998	13 657	17 924	17 756	30%
derived products: flour, etc.)	Pays tiers	13 542	7 420	10 500	9 600	29%
	UE	7 346	6 113	7 300	8 032	31%
Final stocks	Exportations farine	247	226	210	210	-7%
available for the	Total utilisé	36 435	28 201	33 416	33 039	17%
next marketing	Stock final	3 028	2 341	3 678	2 862	22%
year	_					

Methodology for monitoring and forecasting the production: areas, production, yields

The Céré'Obs Program

- Céré'Obs is a programme implemented by FranceAgriMer to monitor crops conditions and the progress of development stages
- Crop monitoring is carried out by field agents who report qualitative and quantitative information every week, from sowing to harvest (with a winter break).
- This allows observers in the sector to have continuous monitoring throughout the development cycle
- ... and anticipate potential constraints.



- Website: <u>https://cereobs.franceagrimer.fr</u>
- A weekly report is released every Friday at 9am
- Free access to the release by registering to the newsletter feed.

Methodology for monitoring and forecasting the production: areas, production, yields

Areas and production: data from MAA (Unit for Statistics and Prospective - SSP)

Data on the surface area and production of French field crops are published and regularly revised by the MAA according to a predefined calendar each year and available on the Agreste website

Useful links:

Agreste - MAA:

https://agreste.agriculture.gouv.fr/agreste -web/

Calendar of official publications:

https://agreste.agriculture.gouv.fr/agresteweb/statisticons/CALENDRIER-INDIC-CONJ/listeTypeStatisticon/



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Infos rapides

Calendar of publications on N/N+1 (winter cereals)

	Year N	Year N+1
Jan		
Feb		
Mar		
Apr		1st estimates of spring barley planted areas
May		
Jun		1st estimates of spring barley production
Jul	> Starting of the NMY	 1st estimates of SW, DW and winter barley production 1st publication of NMY N+1/N+2 Cereals Balances sheets by FranceAgriMer
Aug		 Beg. August: Early press release on quality harvest. Mid-August: Early publication of field quality survey on soft and durum wheat
Sep	 Starting of planting → Starting of Céré'Obs monitoring until harvest 	Publication of final quality of soft wheat and durum wheat
Oct		Publication Qu@litalim of feed barley
Nov		
Dec	1st estimates of planted areas of soft wheat, durum wheat, winter barley	

Thank you!

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www.scoop.it/topic/med-amin
twitter.com/MEDAmin_network

