

MED-Amin

Réseau méditerranéen d'information sur les marchés agricoles
Mediterranean Agricultural Market Information Network

From Space to Farm

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Edito

As the race towards the next 2021 harvest is progressing, the [JRC MARS Bulletin Vol. 29 No 4 - Crop monitoring in Europe](#), April 2021 announced limited impacts of cold spells on annual crops. Many parts of Europe experienced colder-than-usual temperatures during the period of review, with distinct cold spells around mid-March and in the first half of April. Minimum temperatures on the coldest days were among the lowest in our records in a large belt extending from Scotland to southern Italy and Greece. Temperatures during this period strongly contrasted with a warm weather anomaly at the end of March. Marked rain deficits were experienced in Mediterranean regions and in several parts of western and central Europe. The cold and/or dry weather conditions hampered the growth and development of winter crops and caused delays to the sowing and emergence of spring and summer crops.

Nevertheless, as it is still early in the season, negative impacts on annual crops are expected to have been very limited, and in only a few cases have led to significant downward revision of the yield forecasts, such as for rapeseed and durum wheat in France and several crops in Italy. Impacts on vineyards and fruit trees have been severe, however. The temperature surplus in northern regions and the precipitation surplus in eastern Europe and central Mediterranean regions were mostly favourable for crop growth.

The MED-Amin early harvest forecast released the [first Bulletin](#) of a series of three until harvest 2021, covering most of the network member countries. At the end of February 2021, the general outlook for winter crops across the Mediterranean region is rather positive and mainly in line with the last 5-year average condition. Three main agrometeorological events interested the region during this first half of the campaign. A lasting drought affected the southern rim of the Mediterranean (central Maghreb) in the September – November period.

This prevented normal soil preparation, and hampered crops in the early vegetative stages, letting future harvest already at risk. The storm Filomena hit the Iberian Peninsula at beginning of January, triggering local floods and an exceptional snow event in large parts of the area, especially to the north. This event was accompanied by a cold spell that lasted sometimes more than ten days (e.g. Spain, France), mid-January, and heavy rains causing locally important floods and soaked soils in particular in North-Western Morocco and South-Western France. Another cold spell waded Northern

Mediterranean countries, including Anatolian Peninsula and Balkans.

At the end of April 2021, winter crop conditions improved in most of the region, with good perspectives for the upcoming yields and harvest. However, in central Tunisia, and large parts of Algeria's productive regions, crop conditions are poor and tend to below-average yields. The output will be likely significantly below the 5-year average for barley this year. In France and Italy, the brutal cold spells of April just after a hot wave may have affected negatively crops in northern regions. Durum wheat crops in southern regions suffered from drought conditions. Stay tuned to be aware of the next Bulletin.

These elements were discussed during a [webinar organized in collaboration with the International Grain Council \(IGC\)](#) on May 5, in addition to the crop potentials of the top wheat and barley exporting countries.

RUSSIA

Lower production

(IKAR, 27/04)
 Russian agriculture consultancy IKAR has downgraded its forecast for Russia's 2021 wheat crop to 79.5 Mt from 81 Mt, on April 22. The forecast was lowered as farmers will need to re-sow wheat on a large area of Russia's central region after the winter. Moreover there are other places where plantings are "not in an optimal shape". This contributed to push wheat prices up.

ALGERIE

Epidémie bride l'envol

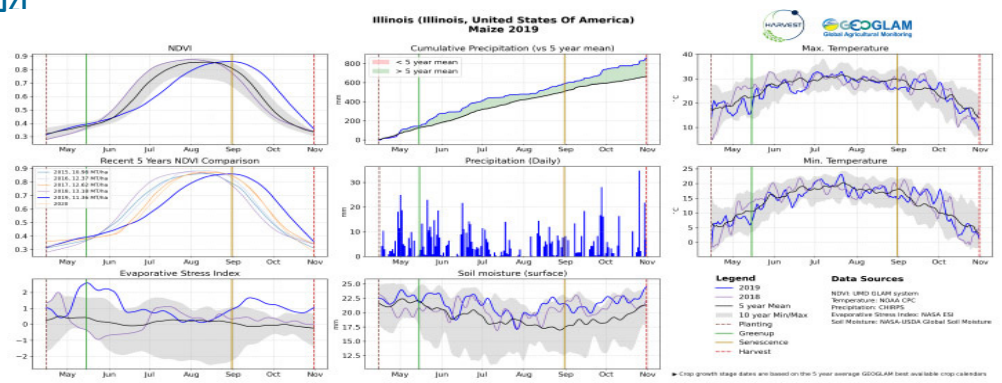
(The Economic Times, 22/02)
 L'apparition d'un foyer de contamination de grippe aviaire dans l'est du pays met à mal le marché de l'export, encore faible mais prometteur. La Russie, après la Chine et la Mauritanie, a freiné ses importations de volailles algériennes. Selon le ministère, le foyer de grippe aviaire H5N8 hautement pathogène, découvert à la fin de janvier dans un élevage dans la wilaya d'Oum el Bouaghi, est aujourd'hui « éteint ».

CHINA

To cut corn, soymeal content in feed Asian feed buyers switch to wheat

(Financial Post, 28/04)
 Asian feed manufacturers are switching to wheat in animal rations as multi-year high corn prices constrict demand for the yellow grain widely used to fatten hogs and chickens.

Some of the world's top corn buyers such as China, South Korea and Vietnam are buying more wheat from Australia and the Black Sea region in the months ahead as the landed cost of corn has climbed to a rare premium to wheat, said two Singapore-based grains traders.



From Space to Farm: How EO technologies are revolutionizing agri-food systems

Extract from [NASA Agriculture, 26/04](#)

Over the past decades, agri-food systems have evolved in many aspects, but so have the Earth observing technologies (EOT) that make it easier to understand and monitor every step of this complex chain, bringing transparency and efficiency to the overall system. Numerous EO satellites have been launched into space by international space agencies within the last decade, serving to collect (or "remotely sense") data.

With the help of satellites and EOT, producers have a better understanding of weather patterns and can plan the optimal time to sow. With GPS-based technologies, producers can use precision agriculture to specifically apply only the needed amount of fertilizers, herbicides, and seeds. While those crops are still developing, farmers can use EOT to monitor agro-meteorological conditions such as temperature and precipitation, and their impacts on crop conditions—all of which help understand if today's conditions are following the average trends seen in previous seasons and even estimate the potential yield they can expect to harvest months in advance, which is extremely important for financial planning. If anomalies occur, the EOT data can warn us well in advance of a potentially catastrophic harvest season which enables earlier mitigation actions.

At a national level, having accurate and timely information helps policy makers to enact more suitable mitigation plans if there is an unusual shock to the food system (i.e. extreme weather events, [food price changes](#), a global [pandemic](#), etc.), not only for countries whose economies depend on those crops to be exported but also those countries who rely on imports for their food security. EOT can also help to put many farmers literally on the map, and

provide policymakers with timely tools and resources.

At a global level, with the help of information provided by satellite data, the early warning community (incl. [GEOGLAM](#), [FAO/GIEWS](#), various humanitarian organizations) have a better understanding of the current situation and can utilize early warning information for early action to more efficiently allocate aid where and when needed. This is also the objective of [MED-Amin for the Mediterranean region](#). Crop production estimates play an important role in price volatility in different markets, both domestically and internationally, which highlights the need for accurate, cost-effective, and frequent agri-food system monitoring. International communities, such as [FAO/AMIS](#) or [GEOGLAM](#), have been launched by the G20 in an effort to monitor commodity price volatility. For example, AMIS publishes a [monthly crop monitor](#) bulletin as a way of providing access to timely and accurate crop harvest assessments that can prevent from extreme price volatility.

Overall, EOT are making the interlinkages of the complex and sometimes fragile agri-food systems more transparent, accurate, and efficient, while also helping to reduce transaction cost and shedding light on the information asymmetry challenges. In combination with other kind of monitoring ([IGC](#), [OECD](#), [IPRI](#)), these tools enable a rapid assessment of different shocks, a powerful tool for decision making across the agricultural, government, and humanitarian spectrums. At the countries' demand, MED-Amin is also engaged in the development of critical market information access to key-operators of the value-chains (2021-2023 Action Plan in elaboration).

Blé, pain et subventions en Afrique du Nord et au Moyen-Orient (Jan. 2021)

Club DEMETER, France Export Céréales, Racha Ramadan, Dans Le Déméter 2021 (2021), pages 319 à 324

À partir de cartes, de statistiques, d'infographies et de textes traitant de tendances actuelles et rédigés par des professionnels et des chercheurs, les Repères proposent des analyses stratégiques et géopolitiques liées à autant de produits, marchés ou enjeux agricoles et agroalimentaires, en France, en Europe et dans le monde. Un retour historique permet tout d'abord une mise en perspective, au regard du temps long et de

quelques exemples, des menaces épidémiques et épizootiques. Des sujets d'une grande acuité pour l'agriculture et porteurs d'importantes transformations sont, par la suite, décryptés : enjeux environnementaux, autour du potentiel de stockage de carbone des sols, examen des promesses de l'Agtech et de la Foodtech en pleine croissance, mais aussi mutation du secteur de l'Agroéquipement. Les enjeux stratégiques de produits alimentaires particulièrement mondialisés sont décryptés : Céréales, Oléoprotéagineux, Viandes mais aussi produits

de la Pêche et aquaculture, Semences et Sucre. Les analyses rappellent ainsi que ces produits alimentaires essentiels sont au cœur de dynamiques d'échanges et de transformations mondiales ou localisées et qu'ils méritent une attention et des réflexions prospectives.

↳ Téléchargez le [document](#)

Le CIHEAM dresse plusieurs constats préoccupants, dont l'abandon progressif de l'agriculture familiale et le faible renouvellement générationnel.



L'agriculture et l'alimentation, clés de la relance au Maghreb et au Moyen-Orient

Par Mohamed Sadiki, Président du conseil d'administration du CIHEAM et Placido Plaza Lopez Secrétaire Général du CIHEAM - Extrait de [l'article Jeune Afrique, 13/04](#)

La crise actuelle est l'occasion pour la région méditerranéenne de favoriser des systèmes alimentaires plus durables et plus inclusifs, sources d'emplois pour les jeunes et les femmes.

Depuis plus de 60 ans, le CIHEAM observe et analyse les évolutions dans les territoires ruraux et agricoles méditerranéens. Il souligne le manque d'attractivité des métiers de la terre et de la mer pour les jeunes – en raison notamment d'un statut social peu valorisé qui les pousse au départ, d'abord à l'intérieur du pays puis, souvent, à l'international. Parallèlement à la forte croissance démographique dans la région, il suit et alerte sur la dépendance croissante des pays de la zone MENA (Moyen-Orient et Afrique du Nord) aux importations, notamment en céréales. Les effets du changement climatique, la diminution et la dégradation des ressources naturelles pèsent aussi sur la sécurité alimentaire.

La crise du Covid-19 a mis en évidence que les secteurs de l'agriculture et de l'alimentation étaient essentiels dans l'équilibre de nos sociétés. L'importance de la souveraineté alimentaire, et d'un retour à la production locale, est apparue très vite, avec la crainte de ruptures dans les chaînes d'approvisionnement et de pénuries, confortée par un enjeu croissant sur la durabilité de nos modes de production et de consommation.

La nouvelle génération est de plus en plus attirée par de nouveaux paradigmes alimentaires, avec de nouvelles exigences en matière de santé et de durabilité environnementale – le bio, les produits du terroir, les circuits courts ou encore l'agriculture urbaine. Des systèmes alimentaires résilients permettent de créer des ponts entre les

territoires et les populations, ils tiennent compte des générations futures tout en valorisant les patrimoines culinaires et gastronomiques.

Or l'agriculture, la pêche, l'agro-business et le tourisme rural durables et responsables, qui reposent notamment sur des dynamiques public-privé, peuvent contribuer de manière significative à créer de la richesse en période de relance post-covid.

Dans une région où le taux de chômage des jeunes et des femmes est l'un des plus élevés au monde, ces dynamiques doivent non seulement être accompagnées mais figurer parmi les priorités des États. Ceux qui veulent s'investir pour des systèmes alimentaires plus durables doivent ainsi être considérés non comme un risque à gérer mais comme des porteurs de projets à forte valeur sociale ajoutée.

Rares sont les secteurs d'activités qui, comme l'agriculture et l'alimentation, sont à l'intersection d'autant de sujets de sociétés qui contribuent à la stabilité des territoires et au développement équilibré de nos sociétés.

À ce titre, le CIHEAM invite les gouvernements des pays membres de l'OCDE et de la région MENA à décloisonner les questions agricoles et alimentaires pour en faire des thématiques transversales des politiques publiques post-covid tant en matière de développement, d'enseignement, de recherche que de création d'emplois, et à créer les conditions favorables au dialogue et à la collaboration entre les institutions de formation et de recherche, les entreprises, les acteurs de la finance et les organismes de la société civile, qui ensemble peuvent contribuer à la résilience sociale et économique des territoires.

FAO Food Index ↗

(FAO, 02/12/2020)

The **FAO Cereal Price** index rose 1.2% in April, reversing a short-lived drop in March to stand 26% above its April 2020 level. Maize prices rose 5.7% - to reach a level 66.7% higher than a year earlier - driven by smaller-than-anticipated planting intentions in the US as well as concerns about crop conditions in Argentina, Brazil and the US. International wheat prices were generally steady. While wheat quotations received support from rising maize prices, along with crop condition concerns in the US and several countries in Europe, the expectations for good global production prospects kept prices generally stable. By contrast, rice prices decreased again in April, mainly reflecting currency movements and slow trading activities, with persistent logistical constraints and freight costs continuing to hinder fresh deals.

LEBANON

Locust developments

(Middle East Monitor, 27/04)

Army helicopters are spraying agricultural land in northeast Lebanon to help farmers battle swarms of locusts that flew to the country in what a UN agency said was a "very rare" event caused by a change in the wind direction. The agriculture ministry said on April 26 that large numbers of the locusts had been destroyed and there have been no big farming losses so far but there are concerns that more swarms could be blown to the south of Lebanon.

SCOOPS

Pour plus de news sur les marchés céréaliers, suivez le [Scoop.It MED-Amin](#) !

A retrouver sur :

↳ www.scoop.it/t/med-amin

et le site web de MED -Amin :

↳ <http://www.med-amin.org>

High probability of yield gain through conservation agriculture in dry regions for major staple crops (2021)

Su, Y., Gabrielle, B., Beillouin, D. et al. High probability of yield gain through conservation agriculture in dry regions for major staple crops. *Sci Rep* 11, 3344 (2021).

Conservation agriculture (CA) has been promoted to mitigate climate change, reduce soil erosion, and provide a variety of ecosystem services. Yet, its impacts on crop yields remains controversial. To gain further insight, we mapped the probability of yield gain when switching from conventional tillage systems (CT) to CA worldwide. Relative yield changes were estimated with machine learning algorithms trained by 4403 paired

yield observations on 8 crop species extracted from 413 publications. CA has better productive performance than no-till system (NT), and it stands a more than 50% chance to outperform CT in dryer regions of the world, especially with proper agricultural management practices. Residue retention has the largest positive impact on CA productivity comparing to other management practices. The variations in the productivity of CA and NT across geographical and climatical regions were illustrated on global maps. CA appears as a sustainable agricultural practice if targeted at

specific climatic regions and crop species.

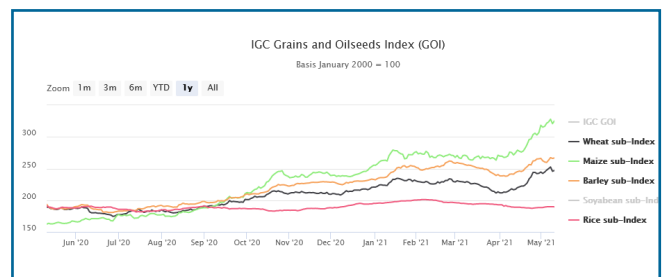
↳ Download the [paper](#).

Global Markets: What is the Trend?

	Global Index ¹ (6 May)	From previous forecast (M/M)	From previous season (Y/Y)
Blé/Wheat	250 ↗	n/a	▲
Mais/Maize	324 ↗	▼	▼
Riz/Rice	190 ↔	▲	▲
Orge/Barley	263 ↗	n/a	▼

¹: Monthly average in USD, base 100=year 2000, ↗↘↔ vs last month
(▲ : Easing ; ▼ : Tightening ; ↔ : Neutral, n/a : not applicable)

Sources : AMIS Outlook - <http://www.amis-outlook.org> and [International Grains Council](#) for the Barley (06/05/21) and the graph below.



Events



IGC Grains 2021 virtual conference:
Grains and oilseeds sector: Strategic risks and resilience post Covid-19
Global trade has been recognised as an important factor for world economic recovery from covid-19 pandemic crisis. The IGC conference in June will focus on future developments in the grains value chain. A side workshop will be dedicated to the pulses market, a challenging sector, where MED-Amin will intervene.

[Link to the conference](#)

MEDFORUM

The MEDFORUM is a bi-annual meeting launched by CIHEAM in 2016 for PhD students and young researchers from the Mediterranean area. It aims to foster communication, dialogue and co-publications between various institutions conducting scientific research in the field of agri-food production and rural development in Mediterranean countries, with a focus on dry and arid regions.

[Lien d'inscription](#)

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Transforming Food Systems After COVID-19

Global Food Policy Report 2021, IFPRI



Transforming the world's food systems is of utmost urgency. Even before COVID-19, hunger was on the rise, many people could not afford healthy diets, and food systems were unsustainable. 2020 brought COVID-19, a crisis which pushed the SDGs further out of reach. But the crisis also yielded lessons and triggered creativity in actions and thinking. A global

sense of urgency and willingness to think beyond traditional barriers, combined with major international summits in 2021, creates an unusual opportunity to make reforms possible.

In the Middle East - North Africa region, despite an economic contraction across the region, MENA's agrifood systems have proven relatively resilient. The drop in household incomes for the poor along with other public health impacts of the pandemic are likely to affect nutritional outcomes adversely. national policy responses are spurring recovery in some countries, but the fiscal implications of these public investments and increased cash transfers remain uncertain.

↪ Read the [report here](#).



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