



MED-Amin Bulletin 2020 – 2 (Outlook at 30 April 2020)

May 2020

Spring drought hampering winter crops potential in Northern and Eastern France; Harvest jeopardized in Western Maghreb region; Exceptional conditions are taking place in eastern Mediterranean countries.

The present bulletin is a **general outlook on the cereal harvest in the Mediterranean region**. It provides early qualitative forecasting of the 2020 cereal campaign, with a particular focus on **soft wheat, durum wheat and barley**. The second bulletin provides an assessment of the situation **at the end of April**. It will be followed by a last update in June.

This initiative to the pilot action for monitoring crop conditions was progressively **developed since 2016** by the MED-Amin network, using a general approach similar to the one implemented by GEOGLAM for the Agricultural Market Information System (AMIS). The MED-Amin network, gathering 13 countries of the Mediterranean region and coordinated by the CIHEAM, aims to share information so as to fight prices volatility within agricultural markets. It supports therefore decision-makers in cost-effective management of the cereal markets in the region. This initiative lays the **foundation for an early warning system** towards food security issues in the region.¹

¹ For more info: www.med-amin.org, <http://ec.europa.eu/jrc/en/mars> and <http://cropmonitor.org>

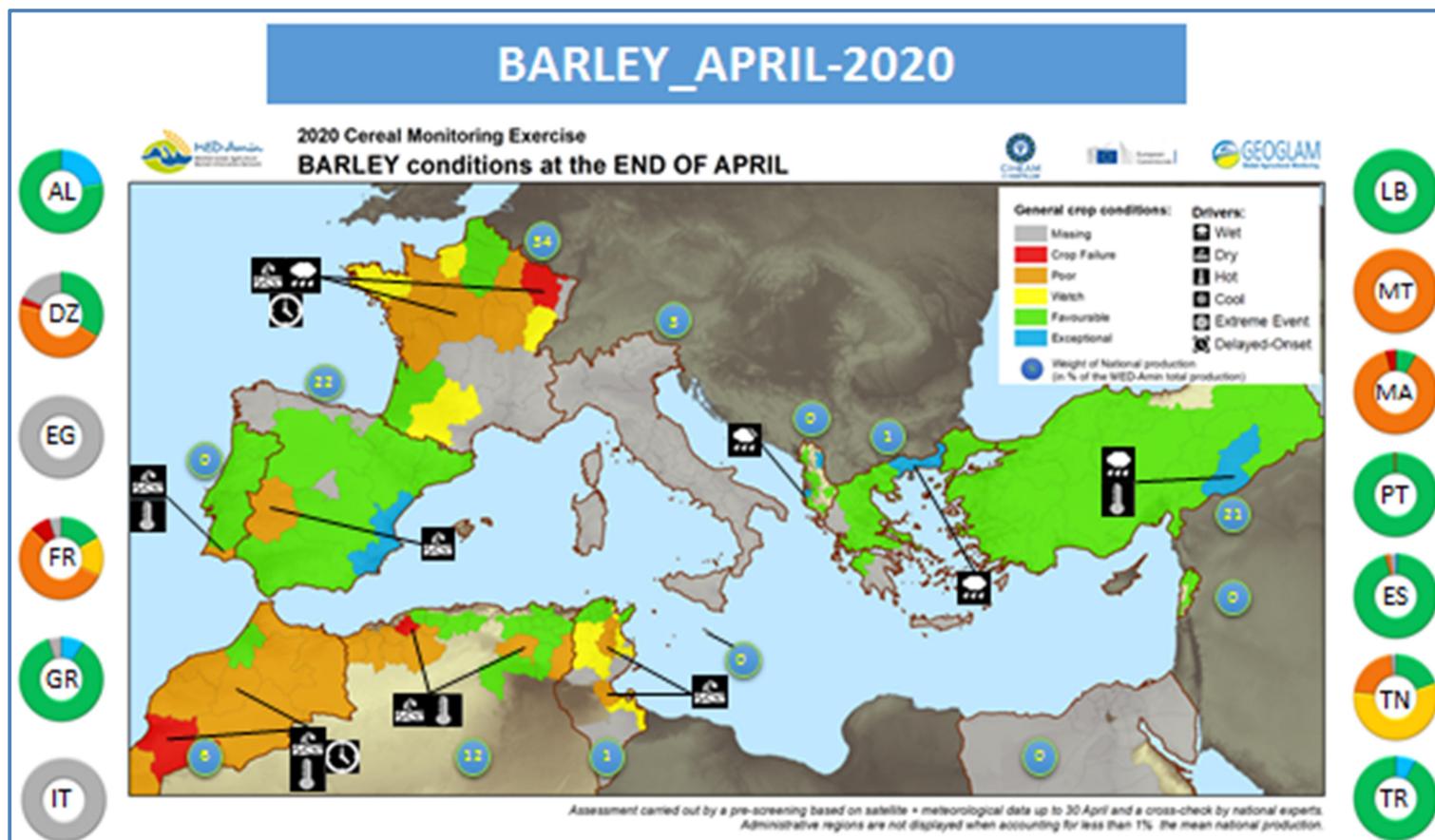
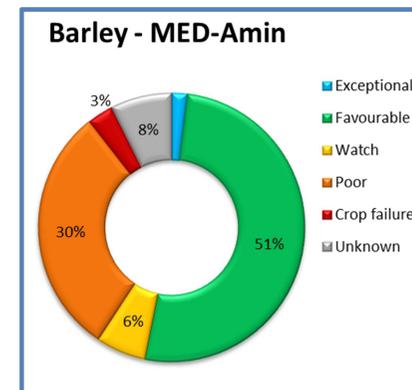
Regional outlook summary

At the end of April 2020, the general outlook for the incoming winter **crop harvest in the Euro-Mediterranean regions is good and in line with the last 5-year average conditions**. In the Northern rim, despite some delayed onset of winter crops due to a rainier than usual Autumn and Winter, plant development was sustained by warm temperatures combined within adequate soil moisture in February, March and April. This winter was one of the warmest recorded for most of the monitored regions. Rainfalls in March and April stopped long-lasting dry conditions featuring some of the regions. Northern and Eastern **France** remains of concern, with conditions being degraded for soft wheat and overall barley production meanwhile conditions fairly improved during April in the South for durum wheat output. Other Euro-Mediterranean countries benefitted from favourable weather conditions, locally being exceptional, as in the cases of **Spain, Greece** and **Albania**. A positive outlook is expected here for the incoming harvest.

On the Southern rim, despite of some rains in April, winter cereals prospects are critical in **Morocco** because of the seasonal lasting drought and above-average thermal profile. Half of barley and wheat planted area is (at different levels) jeopardized. In **Algeria**, national yields might be in-line with or close-to the 5-Y average, as the result of opposite (western versus eastern) crop conditions. In **Tunisia**, the weather was adverse mainly for central-inland regions. Occurred heatwaves and water deficit had an impact on barley cultivation. **Lebanon** and **Turkey** are so far in-line-with an average season, with exceptional forecast locally monitored in Beqaa (LE) and in Sanliurfa (South-East Turkey).

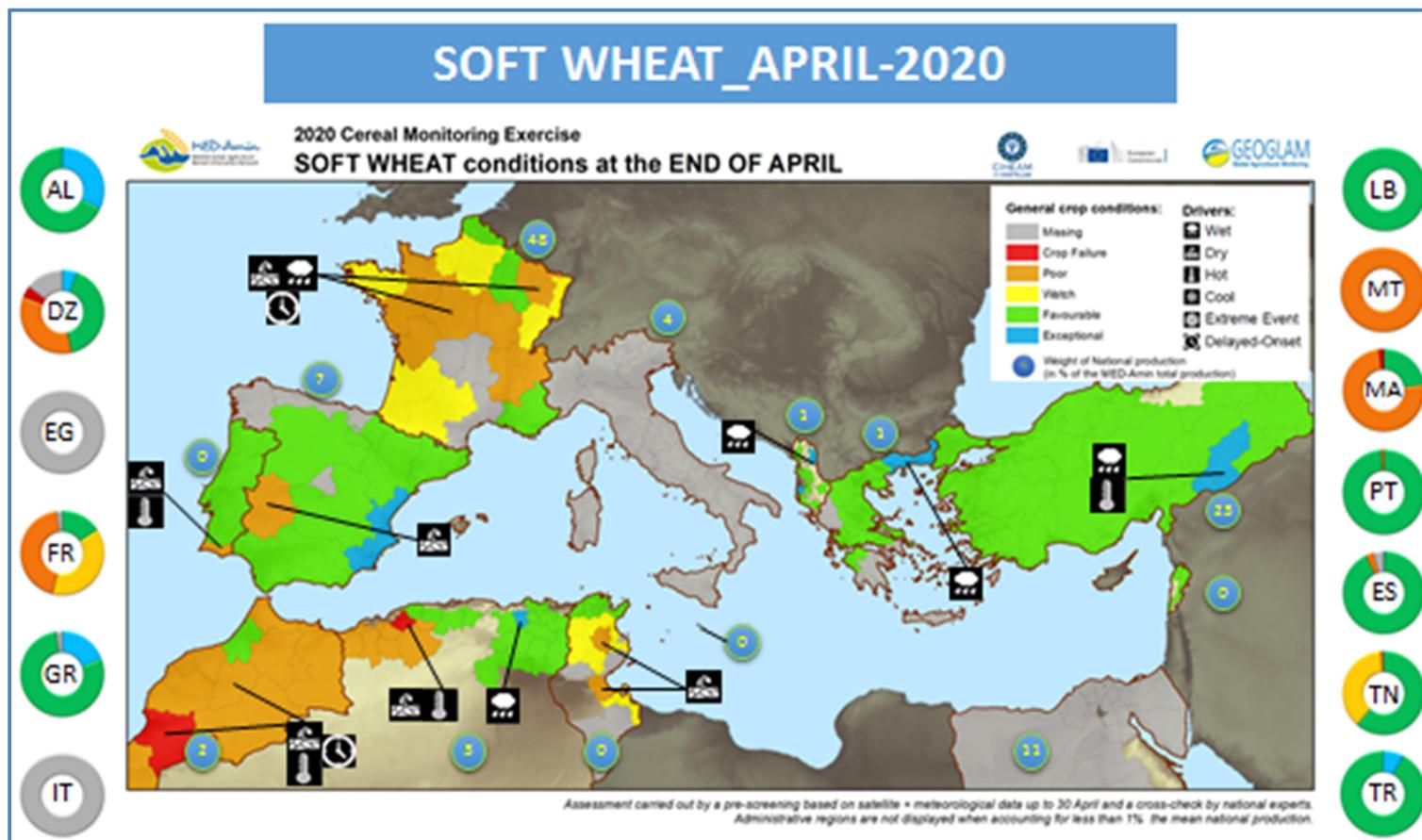
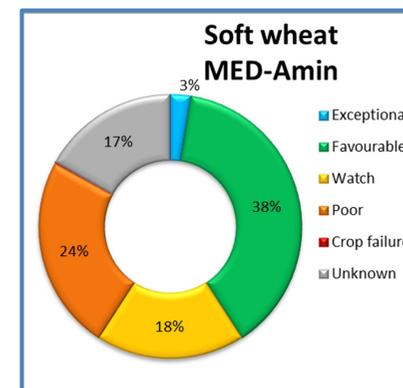
BARLEY is the most affected by adverse crop conditions at regional level (see the pie-chart on the left): The half is considered under favourable/average conditions. About a third of the MED-Amin planted area is under 'Poor' or 'Crop failure'. In North Africa, it is more hampered since its average crop calendar is advanced compared to wheat. Moreover, it is mostly rainfed and often cultivated on arid soils. In European countries, barley was more affected by lasting wet conditions till February 2020 on already fragrant plants since Autumn 2019.

For example, In **France** (FR) that counts for 34% of the MED-Amin barley supply (based on the 5-Y average), several Centre and North-Eastern regions are in 'Poor' crop conditions, or even in 'Crop failure' in Lorraine, which nearly correspond to 2/3 of the French supply (actually 63%, plus 15% considered as 'Watch', see pie chart on the left side of the map below and the crop conditions legend at the end of the document).



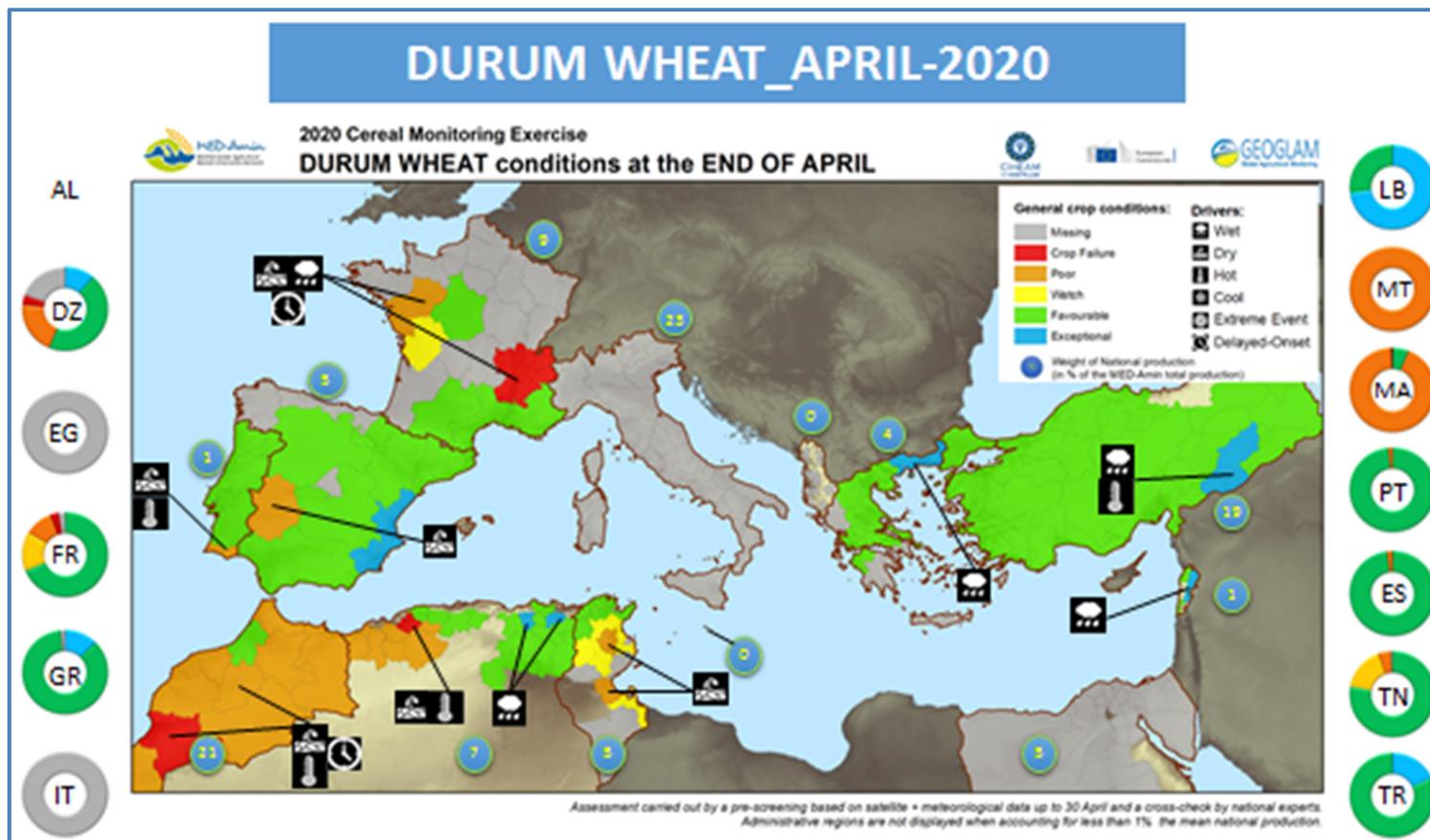
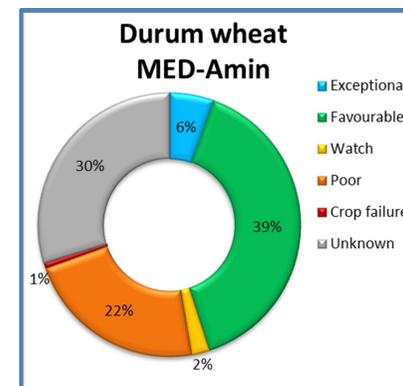
SOFT WHEAT supply is better preserved since the beginning of the campaign even if more than 40% remains under concern ('watch' or 'poor' conditions). Harvest outlook is rather good in general in most of the productive regions.

For instance, all the soft wheat from **Turkey** (TR) (whose production accounts for 23% the MED-Amin production) is considered under favourable conditions at April 30 (see pie chart on the right side of the map beside and the crop conditions legend at the end of the document), even 8% as 'exceptional'. In **Albania** (AL) (1% of the MED-Amin soft wheat total), almost 1/3 is under 'exceptional' conditions.



DURUM WHEAT is a typical Mediterranean production (47% World production), and this **crop is developing under mixed conditions so far**. Half of the acreage in the MED-Amin region is under favourable condition (and 6% 'exceptional'). 1/4 is considered as 'poor' or 'crop failure'. NB: The missing monitoring for Italy weights significantly in the regional outlook.

Now, chance to recover from harvest is limited. In **Algeria (DZ)**, accounting for 7% the production in the MED-Amin area, crop conditions are mixed: the majority 'favourable' (45%), a portion 'exceptional' (11%) and another portion critical (4% 'crop failure', 20% 'poor'). In **Morocco (MA)**, the situation improved a bit versus last monitoring even if still most of the planted area is jeopardized.



National highlights

 ² **Albania:** crop development follows the general trend, despite localized dry, wet or even hot events. April conditions were particularly favourable throughout the country, improving the expectations in struggling areas (e.g. in Kukes and Dibra, recent rains have enabled the efficient use of nitrogen fertilizers according to the stage of development, which was at the end of April from flowering to maturity). The campaign is expected to be normal and with expected 2020 campaign production in line with the medium-term average, with high yield for wheat, barley (and oats) around 3.9 - 4 t/ha.

 **Algeria:** following the delay in planting in most of the favourable rainfed regions, drought took place since January in the west of the country and disrupted the vegetative growth, especially the early planted crops like barley. Efficient precipitation recorded during April recovered partially crops in the West (crop failure rate is around 46% for the wilaya of Relizane and between 15 and 30% for the rest of the Western wilayas), in particular late-planted zones, with very likely negative impact on the regional harvest. In the Centre-Eastern wilayas, April rainfall allowed a good recover of vegetation with an efficient nitrogen fertilization and pest control; the harvest outlook there is positive, in particular for soft and durum wheat crops in Guelma and Mila (yields estimates: 2.8 – 3.4 t/ha). Contrasting conditions between the West and the East will most likely result in a slightly above average season once aggregated at the national scale.

 **Egypt:** *Egypt is not displayed on the map or on pie-charts due to the lack of feedback from the Focal Points. However, the overall outlook is likely favourable thanks to noticeable seasonal rainfall were above average values. Harvest is under way.*

 **France:** the outcome of the campaign is highly uncertain with jeopardized crop conditions. The excess of precipitation and mild temperatures since Autumn 2019, combined with a late but severe drought appears to be the main causes. The end of March and April were marked by a water deficit in the East, which caused plant shortening and raised questions about the nitrogen assimilation efficiency. Bourgogne and the Grand-Est regions were particularly affected. The lack of water has slowed the spread of disease, but a significant presence of aphids induced a notable impact of the Barley Yellow Dwarf (BYD) virus in Eastern regions. In the South, crop conditions improved and suggest a good harvest in particular for durum wheat.

² Evolution of crop condition situation vs last monitoring from April (see [Bulletin 2020-1](#)): ↗Improvement; ↔ Stable; ↘ Deterioration



↔ **Greece:** the winter was generally dry, especially in the January-February period. In March and April overwet conditions and mild temperatures took place, favouring winter cereal growth in most of the country. Due to April rainfalls, fungal infections were reported in some areas of Thessalia. In some cases, these infections were not treated on time, resulting in negative impact on tillering and filling, especially in durum wheat. In general, Barley benefitted the most from this campaign conditions. The general yield outlook is positive, (even exceptional in Anatolian Macedonia), with estimated averages of 3-3.5 t/ha for soft wheat, 2-3 t/ha for durum wheat and 3-4 t/ha for barley.



Italy is not displayed on the map or on piecharts due to the lack of feedback from the Focal Points. However, the overall outlook is likely favourable thanks to noticeable precipitations in April in the South.



↗ **Lebanon:** This campaign was characterized by high precipitation regime with some cold spells extended longer than normal. According to farmers, the output forecast is good despite the level of rust disease occurring on wheat. Durum wheat production could even be exceptional in the most productive region of the Beqaa. During the quarantine period due to covid-19, the Ministry of Agriculture conducted extra field surveys in order to detect the *Eurygaster* insect in order to operate treatment accordingly.



↔ **Malta:** after a rainy period November that affected the seeding, December - March period was dry. The growing process of Winter crops was affected permanently. The crops either fail to grow or they mature very fast producing much fewer forage/seeds than average.



↔ **Morocco:** The country experienced more-or-less marked drought condition from beginning of December up to mid-March. The rainfall shortage was similar to what the country experienced in 2016 (the worst in the last 10 years). In Chaouia and Haouz, the rainfall deficit was 50% on average. In the Saïss, the pre-Rif and the North, it varied between 30 and 45%. Thus, the campaign was on average in Saïss and Gharb and poor in other regions. The Moroccan Ministry of Agriculture estimates a total cereal production of 30 million quintals, from a planted area of 4.3 million Ha, including 2 million ha (46%) of rainfed crops not harvested³ and generally grazed by livestock⁴.

³ From National Focal Point feedback and article on *La Tribune Maroc*, 27 mai 2020.

⁴ <http://www.fao.org/giews/countrybrief/country.jsp?code=MAR>

 ↗ **Portugal:** Areas sown with winter cereals suffered a new reduction this campaign. The weather has been hot and dry in the regions south of the Tagus River. After 2 months (March and April) with some rainfall, water accumulation in the soil has improved and crops vegetative growth has recovered significantly in Alentejo and Algarve. Due to the increase of soil water content and warmer temperatures, crops yields are expected to be above the last 5-year national yield averages: barley +18%; durum wheat +13%; soft wheat +11%.

 ↗ **Spain:** winter cereals have been subjected to an exceptionally mild Winter and benefitted from abundant rainfall supply. By contrast, the first months of the year were dry. Fortunately, rainfalls of March combined with warmer-than-usual temperatures have alleviated the situation, a bit critical in some areas with Durum wheat. In April, the warmth continues favouring vegetative growth, accompanied by much-needed rainfall. However, Southwestern regions (Extremadura and Western Andalucía) could not benefit enough from late rains since the cycle was already well advanced. Everything suggests that barley and wheat harvests will be good likely with above-average yields at national scale.

 ↗ **Tunisia:** winter crop conditions are less favourable than last year. The level of precipitation was favourable in the northern coastal governorates with good harvest prospects while the central regions have experienced drought since the beginning of the year and above-average daily temperature since mid-April and, primarily impacting first barley crops. April rainfall partially helped crops to recover in most of the governorates. Considering regional disparities, barley production will likely be below average, and soft wheat and durum wheat production will likely be average or moderately above-average (last 5-Y-average). Expected cereal yields, compared to the pervious (very positive) campaign are set to decrease to 1.6 tons per hectare (-30% vs 2019, i.e. 1.6 Mt total production), in particular to 2 t/ha and 1 Mt for durum wheat (and 0.9 Mt of soft wheat and 0.5 Mt of barley).

 ↔ **Turkey:** Although the amount of rainfall in the planting period was small in this season, it took place when the crops needed it in particular in Central Anatolia. Therefore, plant development is in line with average in April, and it is expected to obtain high quality products and high thousand grain weight in general. Yields for wheat and barley are expected to be a bit higher than the 5-Y average. A project has been implemented mostly in wet areas, and thanks to favourable conditions, it is expected an increase of yield and production (including summer crop wheat with plantings increasing by 5-10% in total).

General methodology: The forecasting methodology is based on the monitoring of crop conditions using indicators derived from Earth observation, carried out jointly by the CIHEAM-IAMM and the Joint Research Centre of the European Commission (JRC). This allows detecting areas of concern, deviating from normal conditions, which are characterized using the GEOGLAM scale and nomenclature (see below). These pre-screened areas of concern, defined at a sub-national level, are then analyzed, validated or completed by each National Focal-points of the MED-Amin network, taking into account feed backs from field observation and local experts.

Crop conditions legend (GEOGLAM scale and nomenclature):

- **Exceptional:** Conditions are much better than average at the time of reporting. This label can only be used between the grain-filling stages to the harvest stage (which started in Egypt, Lebanon, Malta and parts of Tunisia and Morocco).
- **Favorable:** Conditions range from slightly below to slightly above average at the time of reporting.
- **Watch:** Conditions are not far from average but there is a potential risk to final production. However, at this time it is considered that crops might still recover if conditions improve. This label may only be used between planting/early-vegetative stage and vegetative/reproductive stages.
- **Poor:** Conditions are well below average and are very likely to impact production with a harvest clearly below average.
- **Crop failure:** Crops have been strongly damaged, low yield and area reduction will strongly impact the production.

→ **Update of the harvest forecasting:** The 3rd MED Amin Bulletin of crop conditions and harvest forecasting for soft wheat, durum wheat and barley in the Mediterranean region will be published in June, after the monitoring of May-June conditions cross-checked from the ground.

Stay tuned!

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