SYRIA SEASONAL MONITOR (SEASON 2022 – 2023)

MAY 2023

WFP
World Food Programme

SAVING LIVES
CHANGING LIVES

Highlights

- In April 2023, the rainfall is estimated close to the long-term average and ~39% more than the rainfall in April 2022 (slide 4).
- In December to February the precipitation was below the average. However, the increased precipitation in the second part of March as well as the sufficient rainfall in April has compensated the lack of rain during the previous period (slide 5).
- According to information received from FOs, the current season is significantly better than the ones of the last two years and there are hopes for an increased yield crop.
- April was an overall good month in terms of rainfall. The longest period without rain in four out of the five identified rainfed areas was between 6 and 11 days (slide 8).
- The forecast for the next ten days of May suggests decreased precipitation levels in all Syria (slides 9).
- The NDVI index (which measures vegetation density and plant health) for specific rainfed areas is higher or similar to the long-term average. It is also higher than the NDVI index of the previous season (apart from Dara'a) (slides 10-14).
- As of February, and March 2023, there is a decrease of the informal diesel price in GoS areas and an increase in XB and NES areas (slides 15-16).

How to navigate the report?

New Information

When you see this highlighter icon, it will be important info for this month.

Map

Map or satellite imagery depicting the results of analysis.

New slide

When you see this red ribbon it will be a new type of analysis.

Hot Spot

Area where agricultural activities take place.

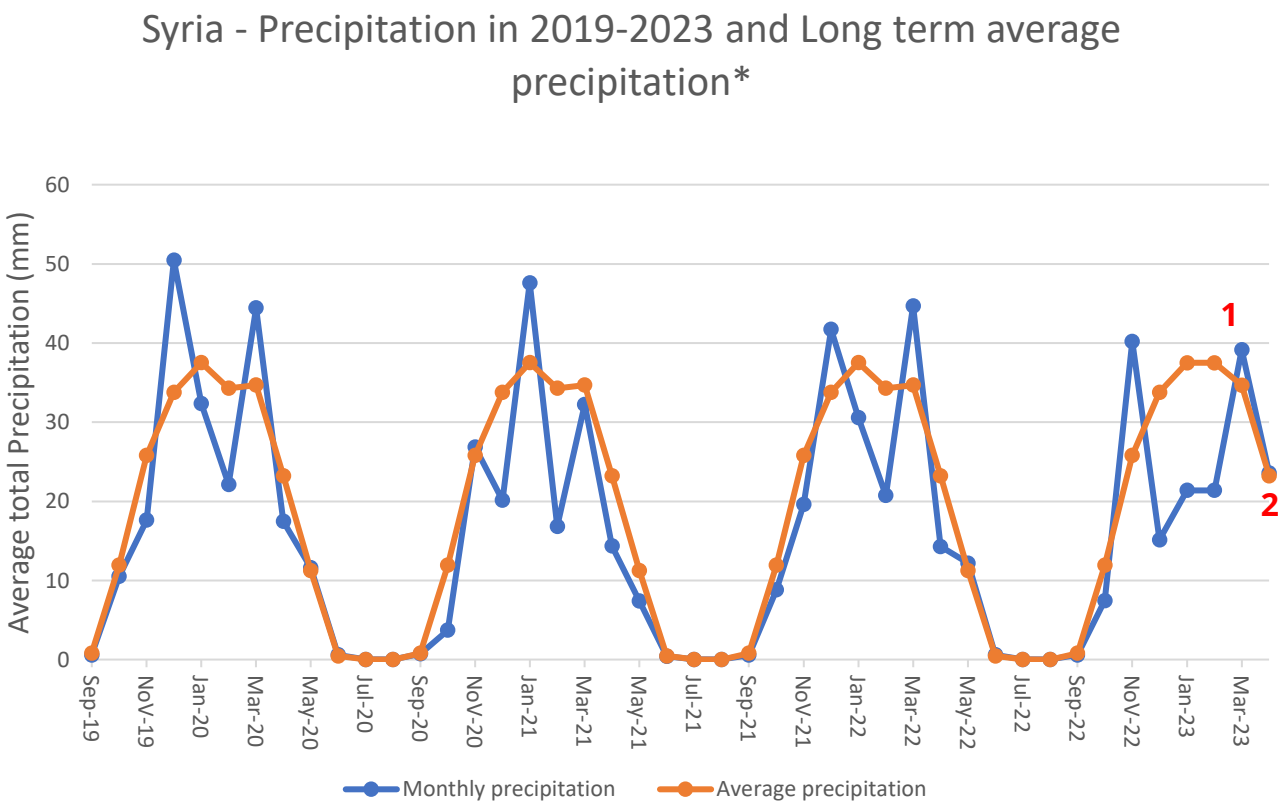
Analysis Chart

When you see this icon it followed by a chart.

Rainfed Area

Irrigated Area

Long-term Average Precipitation and Yearly Precipitation



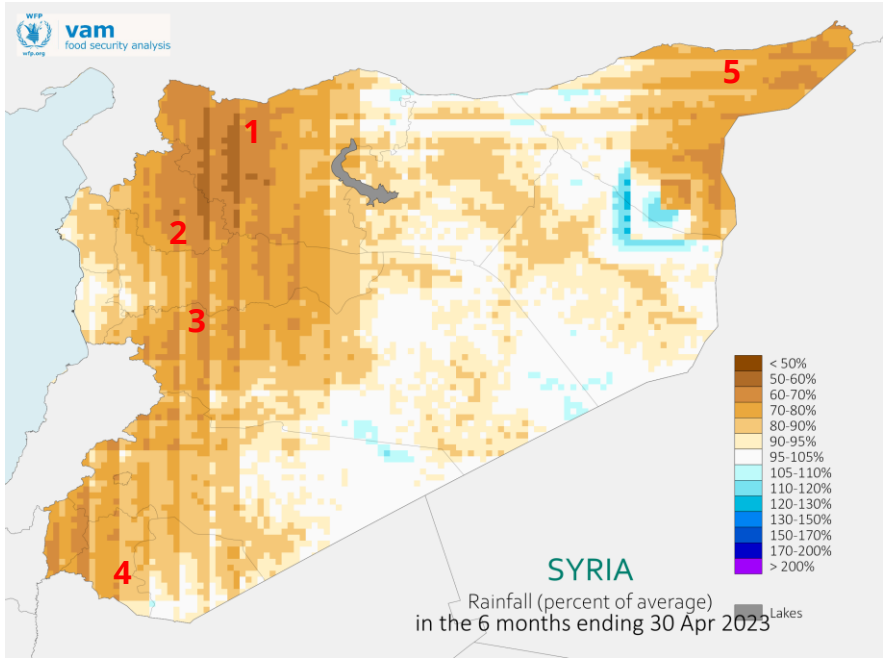
The graph depicts the monthly estimated rainfall in Syria from September 2019 to **April** 2023 (blue) along with the long-term average precipitation (**orange**).

Although the precipitation in the beginning of the season followed an erratic pattern and it was not adequate, the last two months (March and April), the rainfall was above (**1**) and close (**2**) to the average.

This had a positive impact to the cultivated lands and raised the hopes for a better season than the two previous ones.

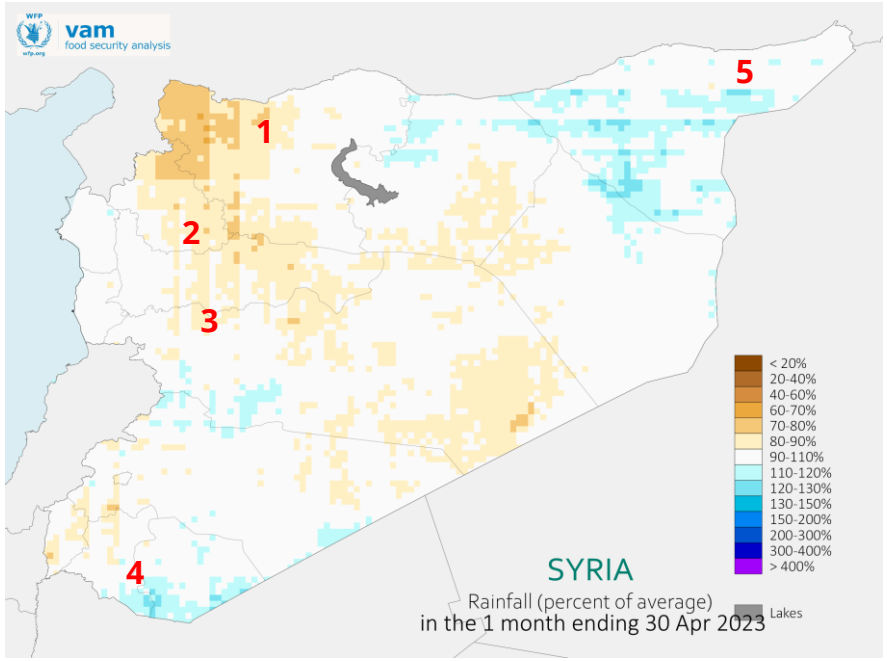
In April 2023, the rainfall is estimated to be similar to the average (23.6mm to 23.2mm).

Percentage of average rainfall from 1st of November to 30th of April 2023



During the **last 6 months** the overall precipitation in Syria was below the average. The rainfed agricultural lands are in areas which have received a precipitation between 60-80% of the average rainfall (**dark, light brown**).

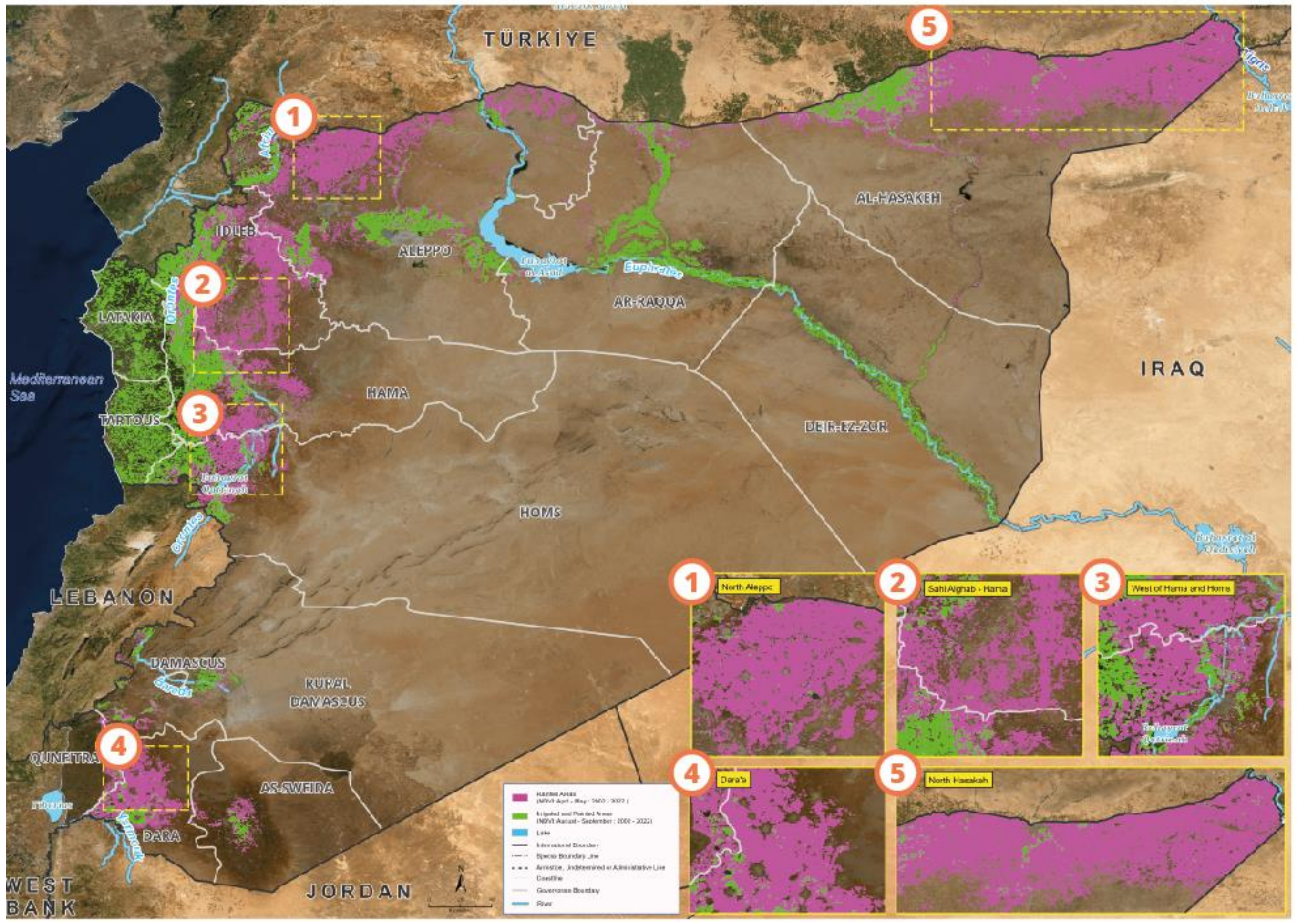
Percentage of average rainfall from 1st of April to 30th of April 2023



In **April** the majority of Syria received from 80% to 120% of the average rainfall (**light brown, white, light blue**). Reportedly, this rain was very much needed to ensure a good agricultural season.

*source: VAM HQ

Syria: Rainfed vs. Irrigated Areas



The analysis highlighted **rainfed** and **irrigated** areas of the last 5 years (2017 – 2022).

These areas are grouped in 5 hotspots depicted on the map:

1 - NW Syria Aleppo,

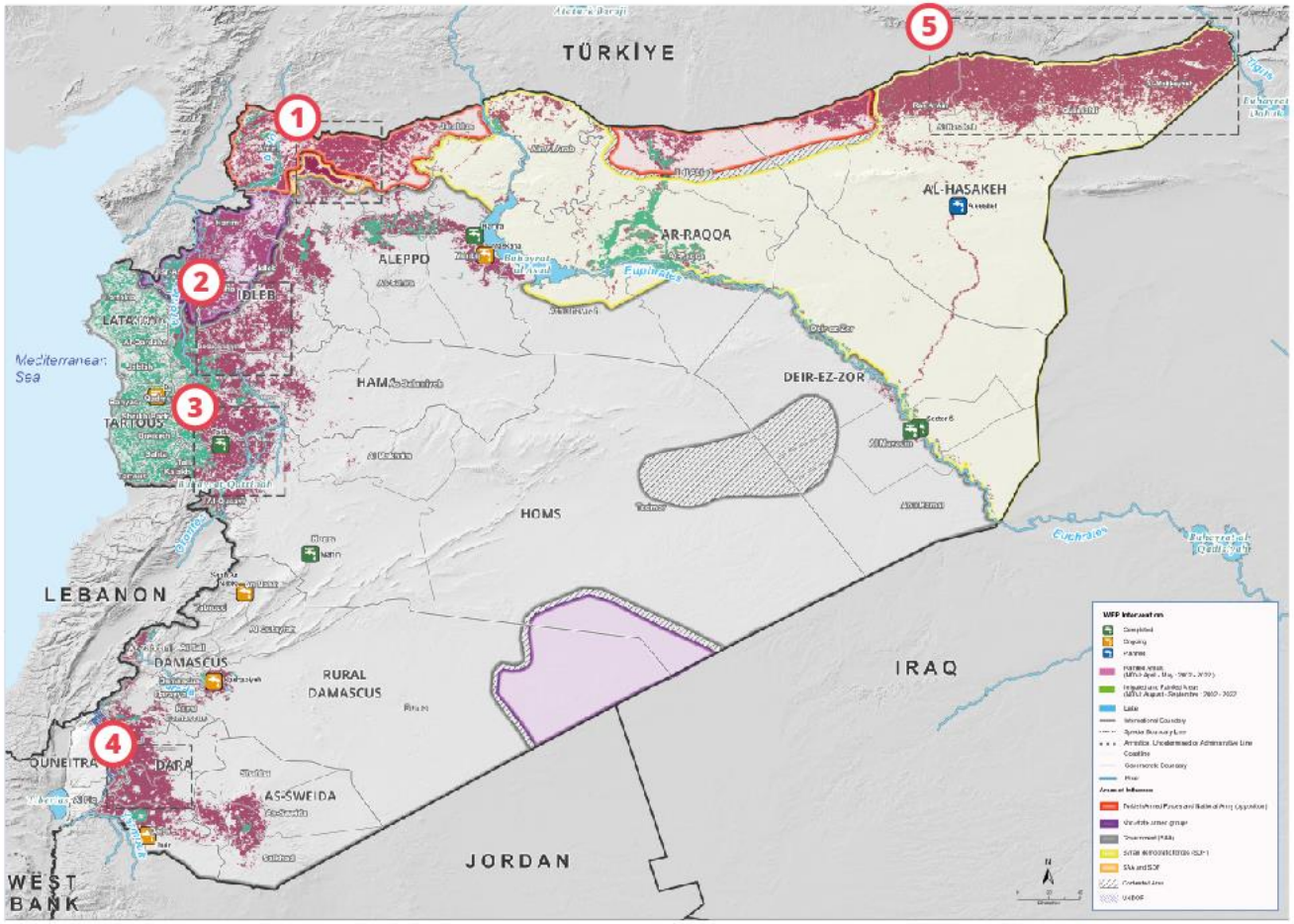
2 - Idleb,

3 - Central West Syria (Hama, Homs),

4 - South Syria (Dara'a),

5 - Al-Hasakah.

Syria: Rainfed vs. Irrigated Areas



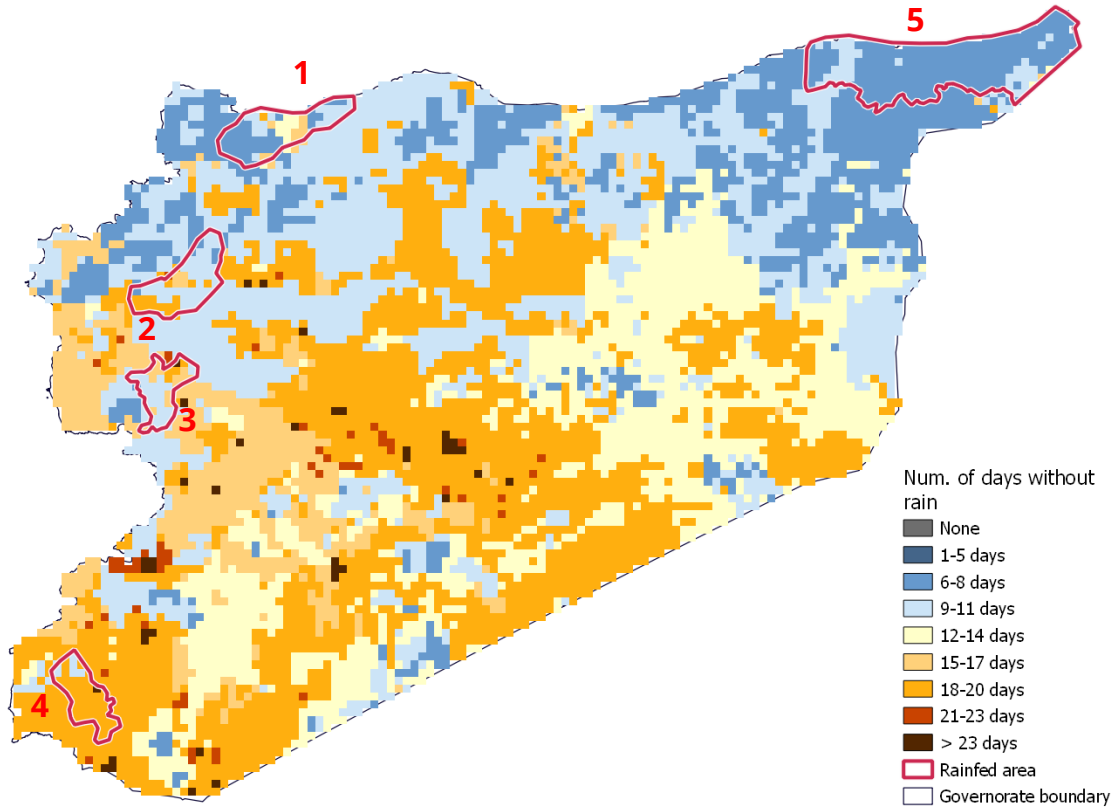
The map depicts the areas of influence along with the **rainfed** and **irrigated** areas of the last 5 years (2017 – 2022) and the 5 identified hotspots.

Hotspot **1** is located in the north of Aleppo governorate in the NW of the country.

Hotspots **2, 3, 4** are in the governorates of Idleb, Hama, Homs and Daraa under government-controlled areas.

Hotspot **5** is located in the NE, which is under the control of SDF.

Dry Sequence: Longest consecutive number of days the last 30 days till the 30th of April



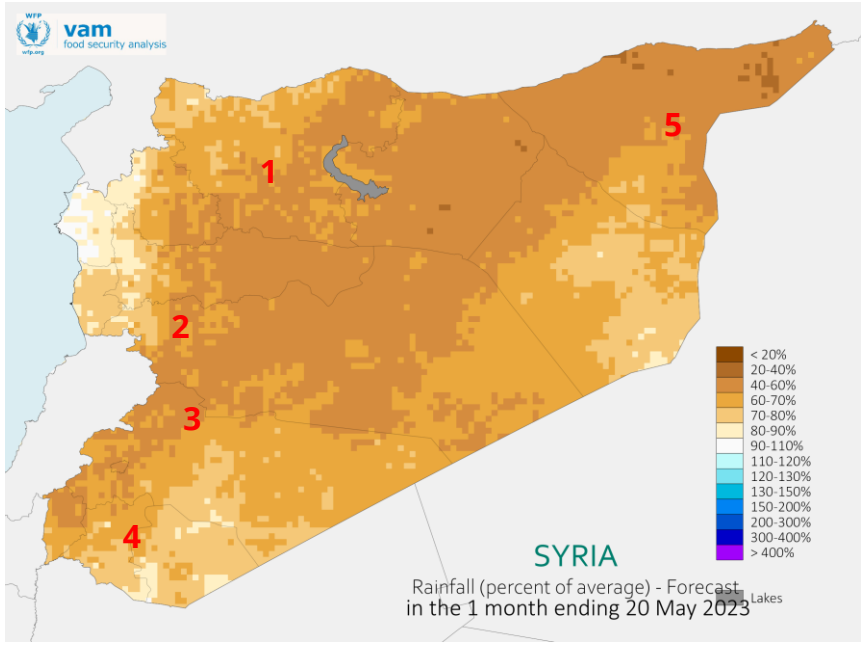
The map depicts the longest consecutive number of days without rain during the last 30 days.

During the tillering/flowering period of the crops water is crucial to ensure the proper growth of the plant (frequent watering after second irrigation).

During the last 30 days, the longest period without rain for four out of five rainfed areas (**1, 2, 3, 5**) was approx. 6 -11 days. In Dara'a (**4**) the longest period was estimated to 18-20 days.

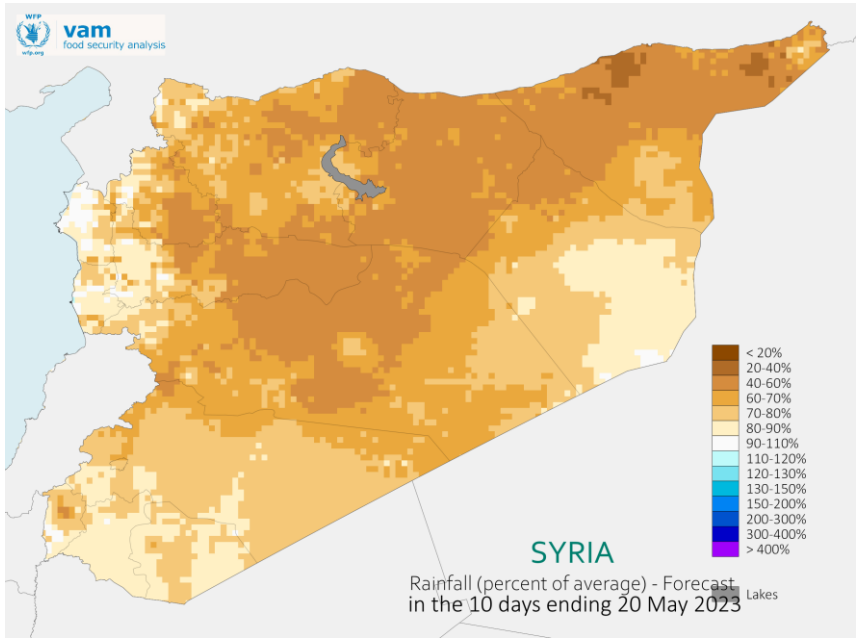
*source: VAM HQ

Forecast: Percentage of average rainfall from 20th of April to 20th of May 2023



According to the current rainfall estimations, the precipitation up to 20th of May is expected to be 40-70% of the average rainfall.

Forecast: Percentage of average rainfall from 10th of May to 20th of May 2023



More specifically from 10th of May till the 20th of May, the forecast indicates decreased rainfall throughout the country.

During the period right before harvesting (late May), irrigation is reduced in preparation of the reaping. At this time of the season, flood events can affect negatively the crops.

*source: VAM HQ

Hotspot 1 – NW Aleppo

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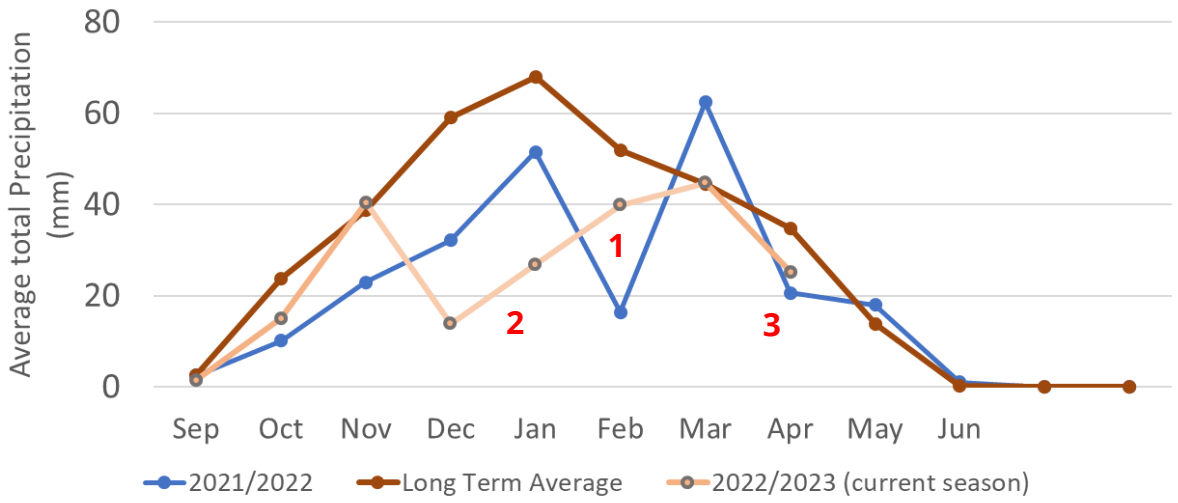


In March, the rainfall was similar to the long-term average while in April (**3**) it was approx. 27% less than the average.

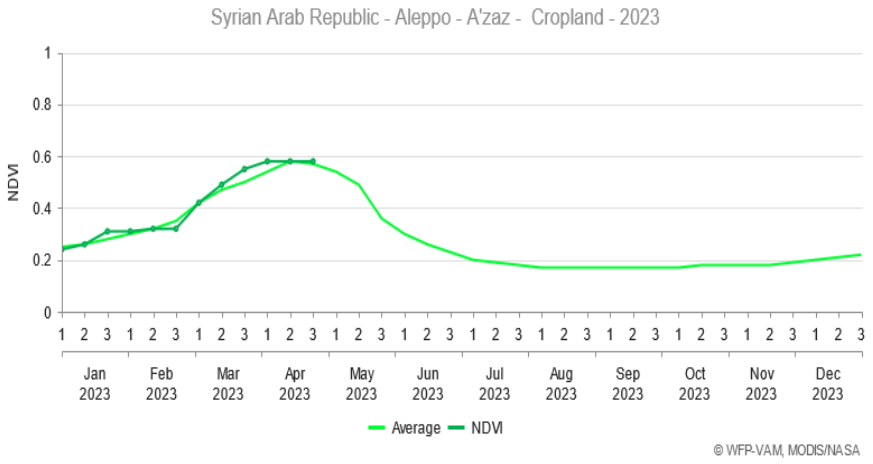
Background:

During February there was ~23% less rain than the average in the area (**1**). This came after the reportedly decreased rainfall of December and January (**2**).

The graph on the right depicts the average NDVI* in relation to the NDVI as of **30th of April 2023.**

In April 2023, the NDVI was estimated above the long-term average (**0.58 to 0.56**) while the previous season (2021/2022) for the same period the NDVI was approximately **0.51**.

Indicatively the NDVI index for season (**2018/2019**), which is considered the most successful in yield crop the last years was **0.63**.



*NDVI index is used to quantify vegetation greenness and is useful in understanding vegetation density and assessing changes in plant health (values between **0.33-0.66** represent a moderately healthy plant. **earthquake affected area.

Hotspot 2 – Idleb

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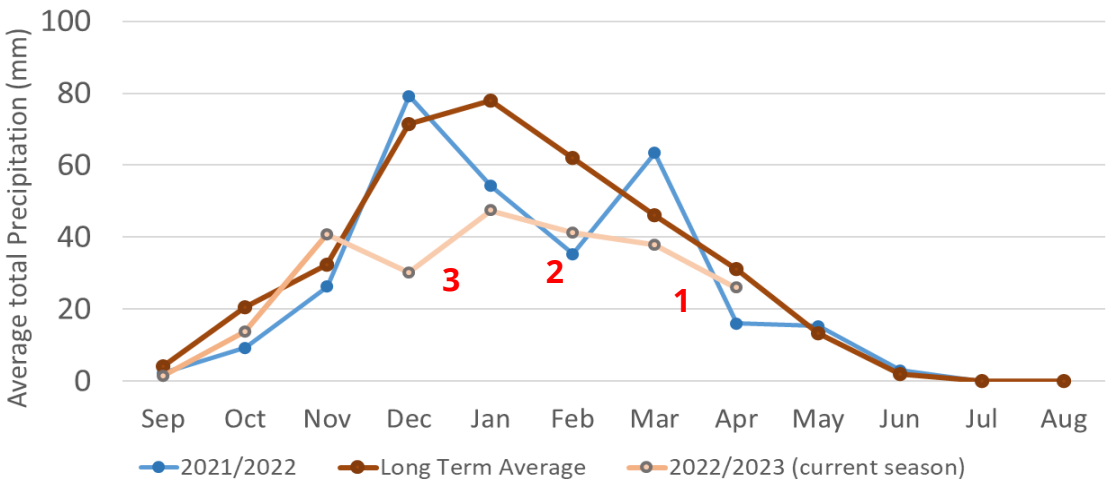
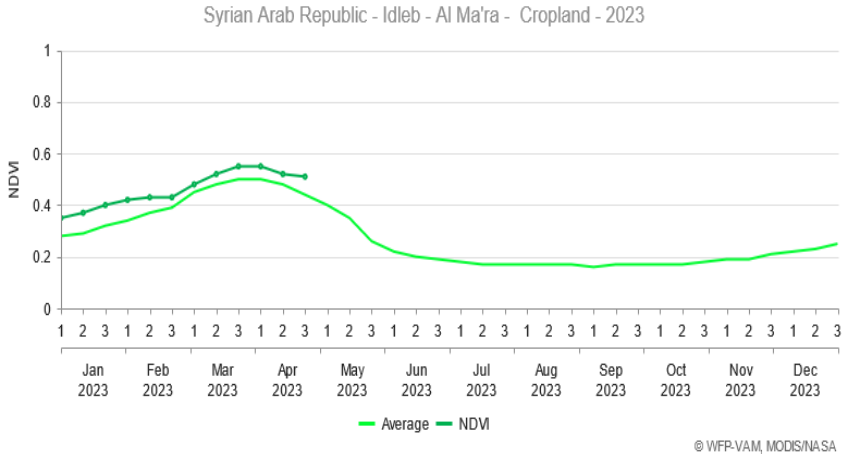


In March and April (**1**), the precipitation was ~17% below the long-term average.

Background:

In February there was ~33% less rain than the average in the area (**2**) - similar to the precipitation in 2021/2022. This came after the reportedly decreased rainfall of December and January (**3**), which was also below the monthly average for that month.

The graph on the right depicts the average NDVI* in relation to the NDVI as of **30th of April 2023.**



In April, the NDVI was above the average NDVI (**0.52** to **0.47**) while the previous season (2021/2022) for the same period the NDVI was lower (**0.41**).

Indicatively the NDVI index for season (**2018/2019**), which is considered the most successful in yield crop the last years was **0.51**.

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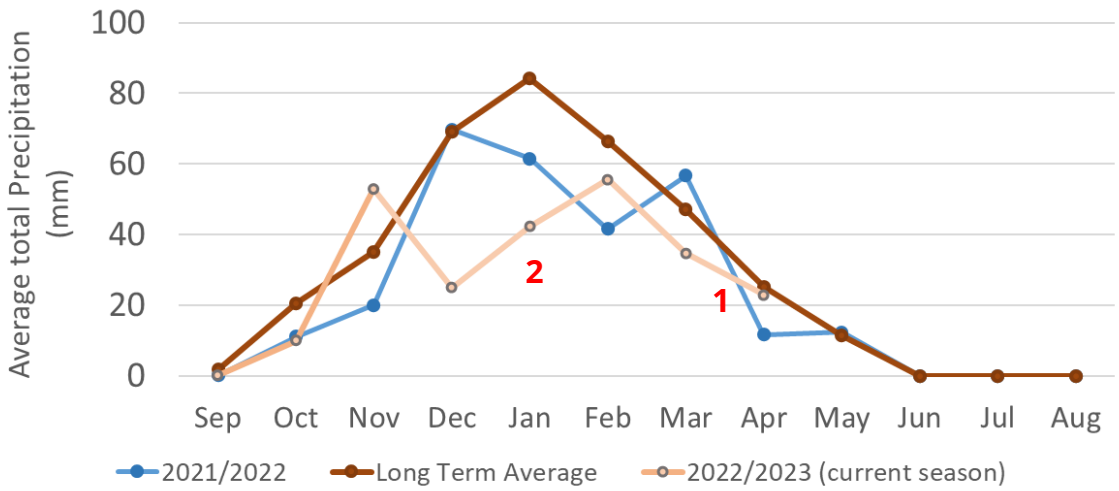
Hotspot 3 – Homs



In March and April (**1**), the precipitation was approx. 17% below the long-term average.

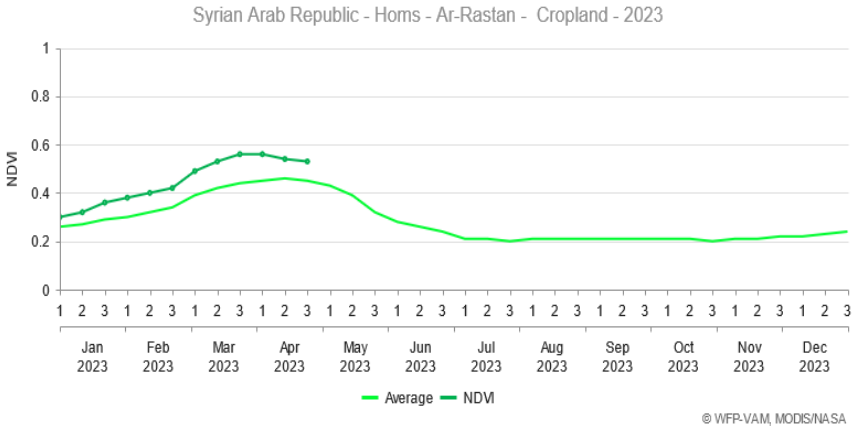
Background:

Similar to other parts of Syria, in December, January and February the rainfall levels were below the average (**2**).

The graph on the right depicts the average NDVI* in relation to the NDVI as of **30th of April 2023.**

In April 2023, the NDVI was above the average (**0.54** to 0.46) while the previous season (2021/2022) for the same period the NDVI was lower (**0.47**).

Indicatively the NDVI index for season (**2018/2019**), which is considered the most successful in yield crop the last years was **0.57**.



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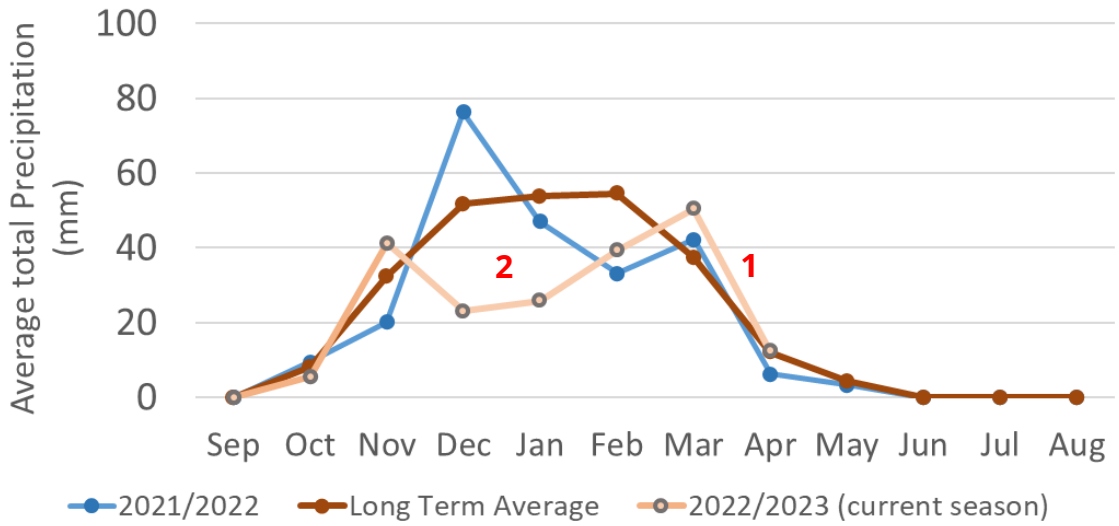
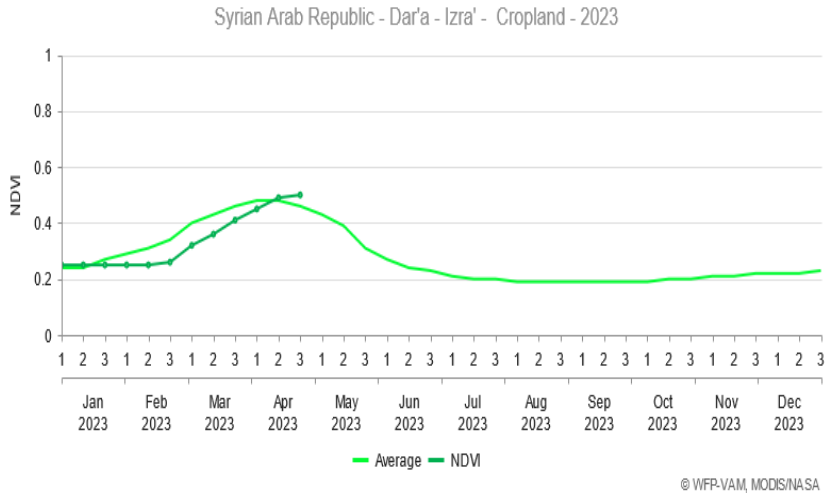
Hotspot 4 – Dara'a



As of March and April, the precipitation in the area was higher than the long-term average (**1**) (34.5%, 2.3%).

Background:
In December, January and February the rainfall levels were below the average (**2**).

The graph on the right depicts the average NDVI* in relation to the NDVI as of **30th of April 2023.**



In April 2023, the NDVI was above the average (**0.48** to 0.47) while the previous season (2021/2022) for the same period the NDVI was **0.54**.

Indicatively the NDVI index for season (**2018/2019**), which is considered the most successful in yield crop the last years was **0.61**.

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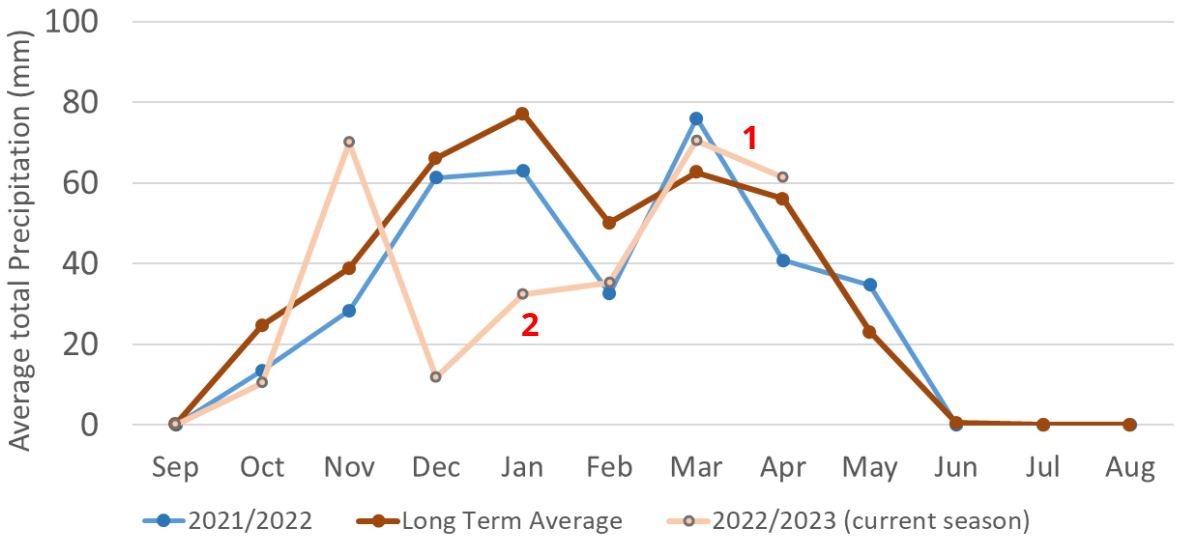
Hotspot 5 – Al Hasakah



In March and April there was a ~11% rain above the average (**1**).

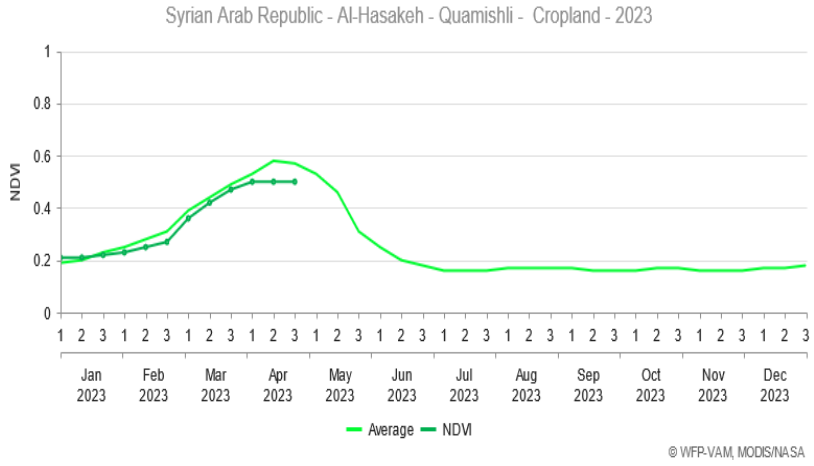
Background:

In December, January and February the rainfall levels were below the average (**2**).

The graph on the right depicts the average NDVI* in relation to the NDVI as of **30th of April 2023.**

In April 2023, the NDVI was below the average (**0.50** to **0.56**) while the previous season (2021/2022) for the same period the NDVI was (**0.41**).

Indicatively the NDVI index for season (**2018/2019**), which is considered the most successful in yield crop the last years was **0.69**.



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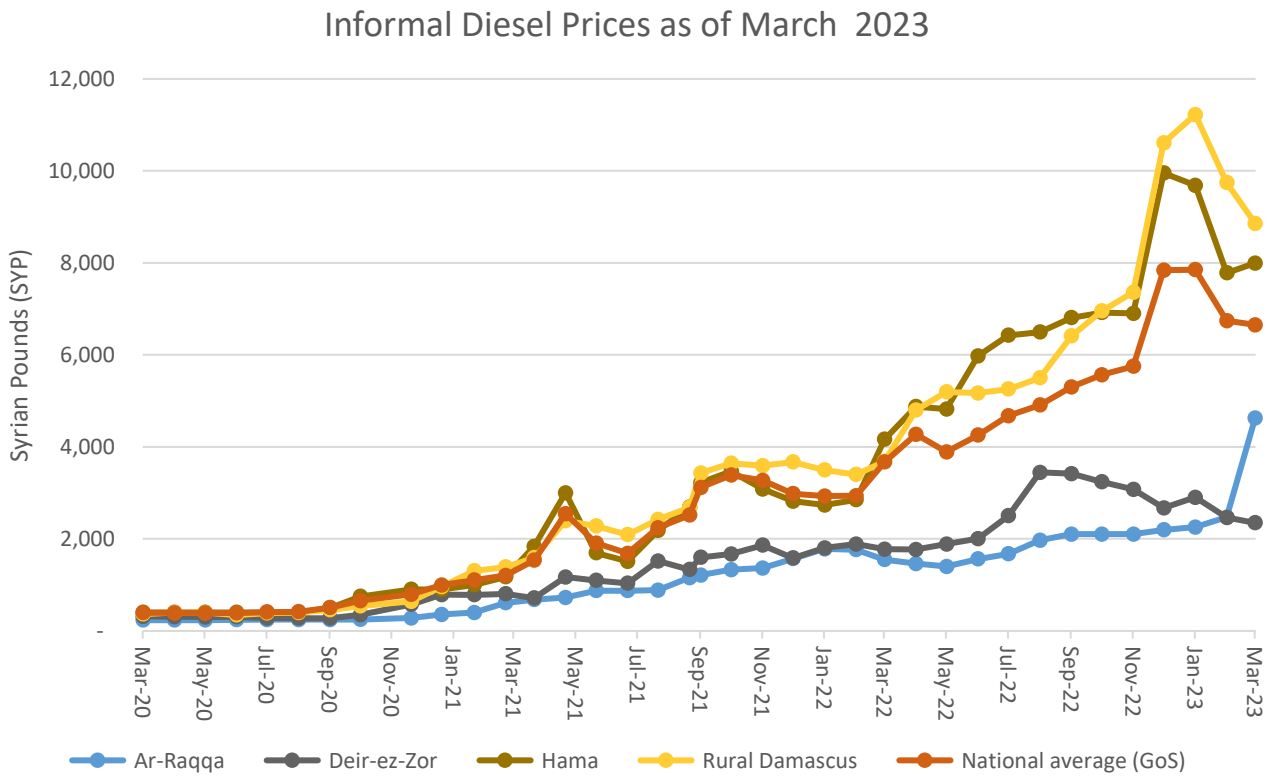
Informal Diesel Prices: In Governorates with Large Share of Irrigated Lands



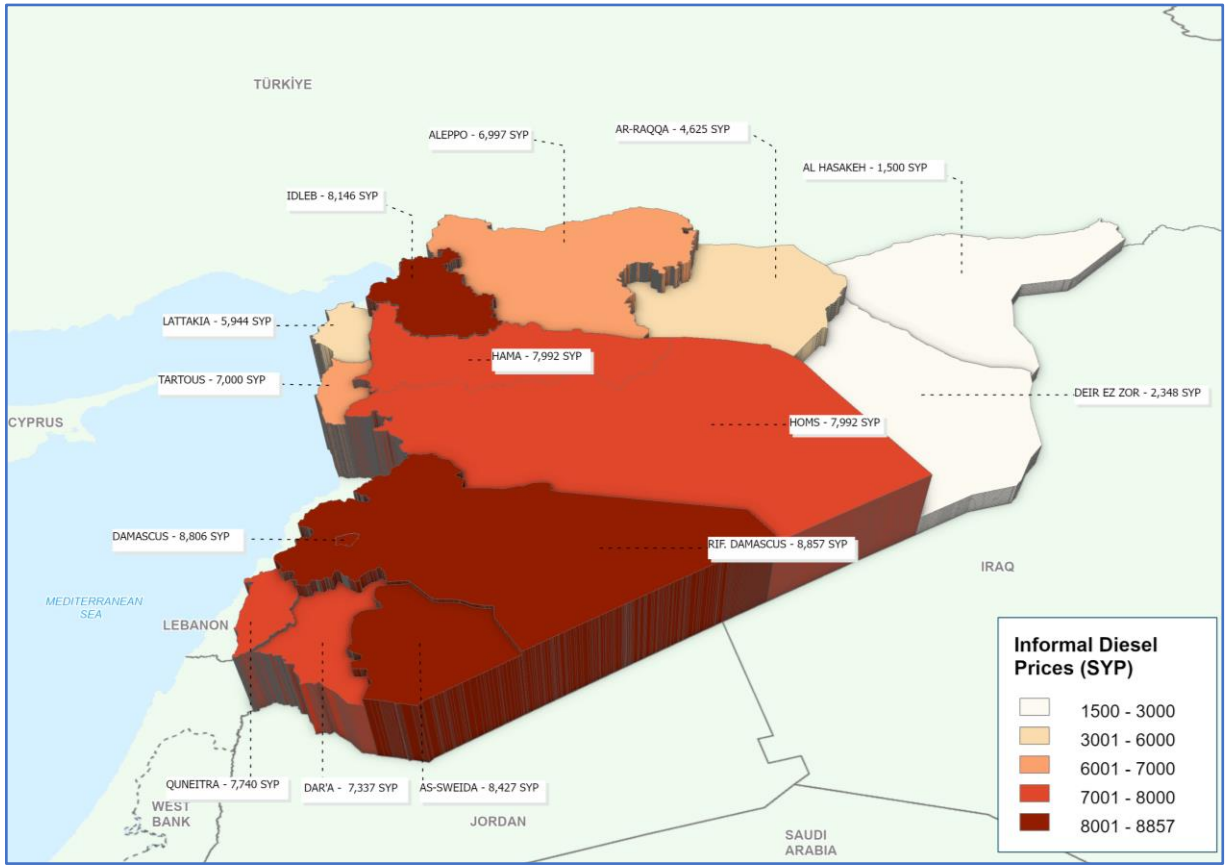
The ongoing fuel crisis in the country means that there is a decreasing capacity to run wells using diesel fuel, meaning irrigated lands themselves are also decreasing*.

Moreover, the increased fuel prices have an impact to the farmers, during harvesting and for transferring their produce to the markets.

As of March 2023, there is a decrease of the informal diesel price in GoS areas and an increase in XB and NES areas. Indicatively, in **Hama** and **Rural Damascus** the average price is above the national average (GoS) **(~8857, 7992** vs. **6651** SYP). In **Ar-Raqqa** there was an increase of **47%** and in **Deir ez-Zor** the price remained similar to the one of February**.

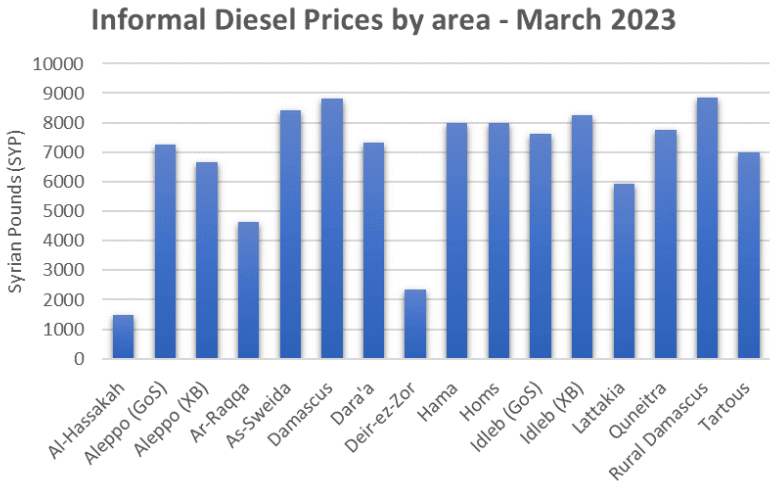
*source: dataviz.vam.wfp.org
** VAM Syria Market team

Syria: Informal Diesel Prices March 2023



As per **March 2023**, Al-Hasakah, Ar-Raqqa and Deir ez-Zor have the lowest price of informal diesel price (below 4,625 SYP).

The governorates of (Rif.) Damascus and As-Sweida have prices above 8,000 SYP*.



* VAM Syria Market team

Summary Table

	Hotspot	Governorates	Areas of Influence	Estimated best wheat production in the equivalent year from 2016-2022 (tons)	Size of area (sq. km)	Estimated population in the area (* 1000)	Population density	Average CARI 2022 (%) **
1	Aleppo (non-government side)	National Army		346,295	1,840	477	259	45%
2	Idleb (government side)	Government		48,764	2,250	9	4	47%
3	Homs	Government		66,372	1,050	240	229	43%
4	Dara'a	Government		106,896	1,180	313	265	44%
5	Al-Hasakah	Syrian Democratic Forces		459,486	5,920	589	99	56%

* The productivity of the season 2020/2021 is not available. The productivity from season with the closest available data is depicted (2017/2018).
**CARI from FSA2022

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