

**Country: Republic of Moldova**

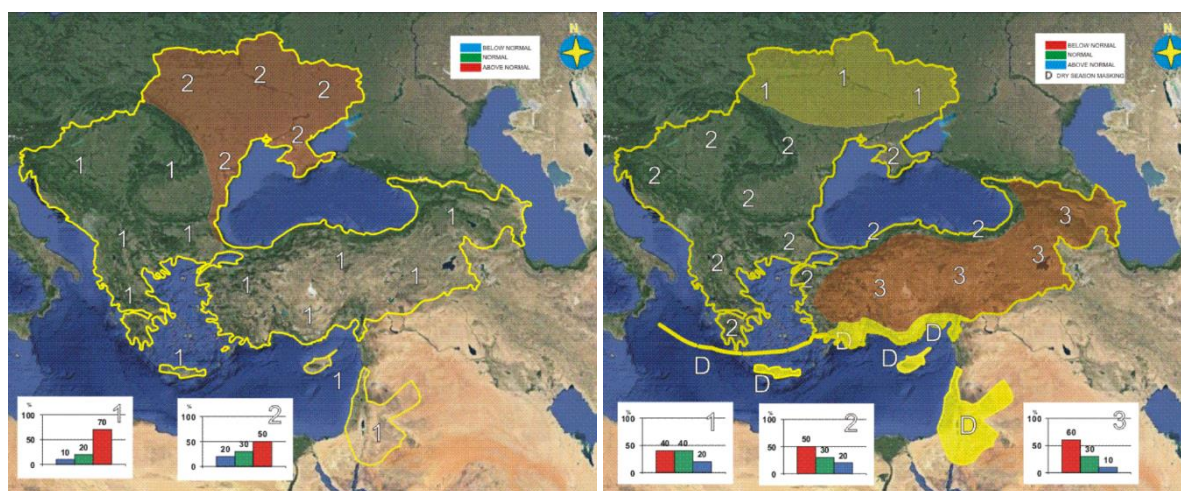
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**Climatological reference period: 1981-2010.**

## 1. SEECOF-27 Climate outlook for Summer Season 2022 for the Moldova



**Above normal**

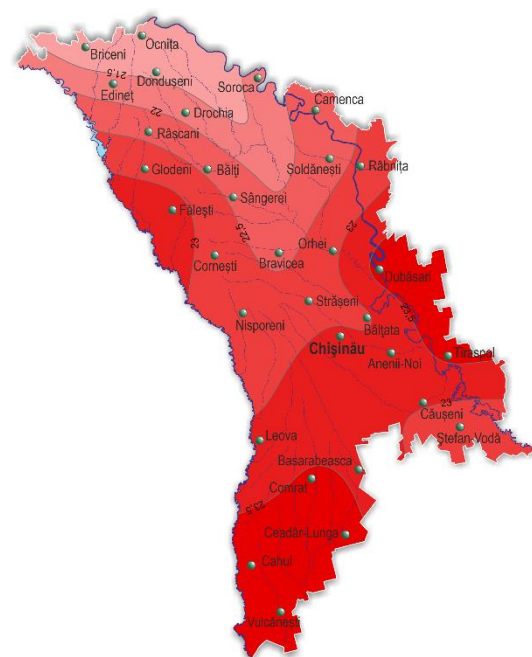
**Below normal**

## 2. Analysis of the Summer Season 2022 in Moldova

The summer of 2022 in the Republic of Moldova was hot and with a lack of precipitation. The stable transition of the average daily air temperature by the value of  $+15^{\circ}\text{C}$ , a phenomenon that determines the beginning of the meteorological summer, took place on the territory of the country on May 7-12, being in terms close to the usual ones.

The average air temperature for this season in the territory was  $+21.1..+23.7^{\circ}\text{C}$ , being with  $1.7-2.7^{\circ}\text{C}$  higher than the norm, which is reported on average once in 10-15 years from the entire period of observations, and in the last 20 years – on average once every 3-5 years (Fig. 1,2).

The maximum air temperature during the summer rose to  $+37^{\circ}\text{C}$  (July, meteorological stations (MS) Falesti, Cornesti, Dubasari), and the minimum decreased to  $+8^{\circ}\text{C}$  (June, MS Camenca, July, MS Bravicea, Codrii, Baltata).

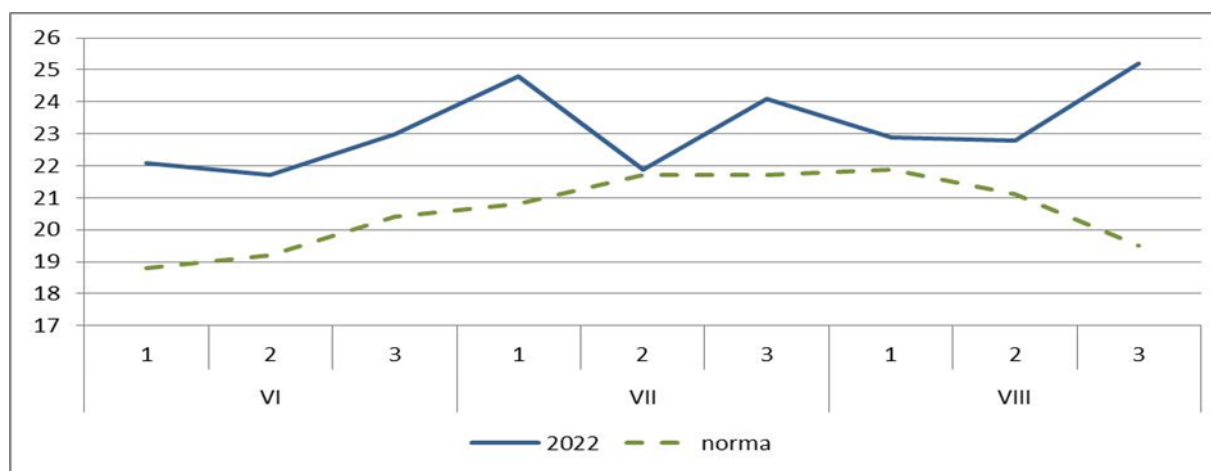


**Fig.1. Mean Temperature in Summer, °C**



**Fig.2. Temperature Anomalies in Summer, °C**

Hot weather was reported in the first decade of July, when the average decadal air temperature exceeded the norm by 3-5°C, which is reported on average once every 10-15 years (Fig. 3).



**Fig. 3. Average decadal air temperature, °C, MS Chisinau**

Abnormally warm weather was also in the third decade of August, when the average decadal air temperature exceeded the norm by 5-6°C and is reported on average once every 20-30 years. The maximum air temperature on August 29 in the territory rose up to +36°C (MS Baltata, Tiraspol, Ceadir-Lunga), which in this decade is reported on average once in 10 years.

The amount of precipitation during the season on 75% of the territory did not exceed 55-130 mm (25-65% of the norm). Only in some districts - 140-180 mm fell (70-90% of the norm). (Fig.4,5).

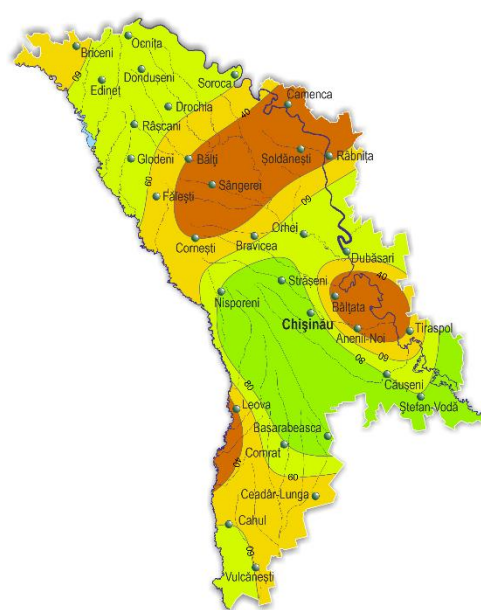
The amount of precipitation by region constituted:

- in the north of the country - basically 54-115 mm (25-60% of the norm), isolated -145-155 mm (70-80% of the norm);
- in the center of the country - basically 60-130 mm (35-70% of the norm), only at MS Chisinau it fell 172 mm (90% of the norm);

- in the south of the country - basically 75-140 mm (40-75% of the norm), at AMP Vulcanesti - 155 mm (90% of the norm).

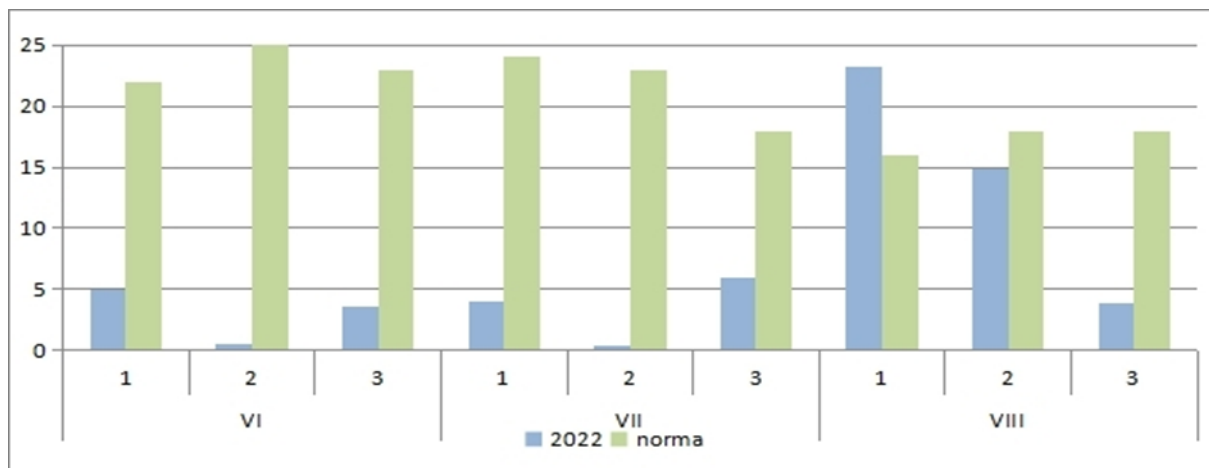


**Fig.4. Amount of precipitation in Summer, mm**



**Fig.5. Precipitation Anomalies in Summer, %**

A significant deficit of precipitation was observed in the period June - July (Fig. 6).



**Fig. 6. The amount of precipitation per decade, mm, MS Chisinau**

In June, the monthly amount of precipitation constituted basically 3-30 mm (15-40% of the monthly norm). In July, 15-40 mm (20-60% of the monthly norm) fell on 50% of the territory, and isolated (on 35% of the territory) their sum did not exceed 1-10 mm (2-15% of the monthly norm).

It should be noted that the significant deficit of precipitation was maintained during the May - July period. The amount of precipitation for this period was basically 30-90 mm (15-45% of the norm), which is recorded in most of the territory for the first time in the entire period of observations, isolated - on average once every 20-30 years.

On some days during the season (July 6, 8 and 27, August 9, 16 and 30), extreme weather phenomena were reported in the form of extreme heavy rains and hail, which caused damage to agricultural crops and damage to objects of the national economy. Thus, according to the data of the automatic weather stations, installed in the municipality of Chisinau, on August 9, within one

hour, 80 mm fell (160% of the monthly norm), on August 9 – within one hour, 52 mm of precipitation fell (105% from the monthly norm).

Compared to the summer of 2021, the average air temperature this season was 1.0-1.5°C higher and precipitation fell considerably less (by 50-300 mm). The analogue season according to the thermal regime is 2020.

### 3. Assessment of the SEECOF-27 Climate outlook for the Summer Season 2022

| Country             | Seasonal temperature |   | Seasonal precipitation |   | High Impact Events   |
|---------------------|----------------------|---|------------------------|---|--|
|                     | Observed             | SEECOF-27 climate outlook for temperature | Observed               | SEECOF-27 climate outlook for precipitation |  |
| Republic of Moldova | Above normal         | Above normal                              | Below normal           | Below normal                                | <p>The high thermal regime and the lack of precipitation, reported in the period of May-July, caused atmospheric and pedological drought. Due to the dry climate, unfavorable conditions were created for the formation of fruit in autumn and spring cereal crops, in corn, sunflower, sugar beet, as well as for the growth and development of vegetable crops and other agricultural crops. The Selianinov Hydrothermal Coefficient (CHT), which characterizes the level of wetting of the territory, for May was on average 0.4, for June and July it was on average 0.3, which corresponds to very strong drought.</p> <p>On some days during the season (July 6, 8 and 27, August 9, 16 and 30), extreme weather phenomena were reported in the form of extreme heavy rains and hail, which caused damage to agricultural crops and damage to objects of the national economy. Thus, according to the data of the automatic weather stations, installed in the municipality of Chisinau, on August 9, within one hour, 80 mm fell (160% of the monthly norm), on August 9 – within one hour, 52 mm of precipitation fell (105% from the monthly norm).</p> |