



# 1 Land and Climate





### *Introduction*

The statistical information appeared in this chapter includes the geographical characteristics and administrative divisions, and climate.

#### *1. Geographical characteristics and administrative divisions*

Iran comprises a land area of over 1.6 million square kilometers. It lies down on the southern half of the northern temperate zone, between latitudes 25° 04' and 39° 46' north, and longitudes 44° 02' and 63° 19' east. The land's average height is over 1200 meters above sea level. The lowest place, located in Chaleh-ye-Loot, is only 56 meters high, while the highest point, Damavand peak in Alborz Mountains, rises as high as 5610 meters. The land height at the southern coastal strip of the Caspian Sea is 28 meters lower than the open seas.

Iran is bounded by Turkmenistan, Caspian Sea, Republic of Azerbaijan, and Armenia on the north, Afghanistan and Pakistan on the east, Oman Sea and Persian Gulf on the south, and Iraq and Turkey on the west

Administratively, the country is divided into Ostans, Ostans into Shahrestans, and Shahrestans into cities and Dehestans.

Highlands of Iran can be divided into four mountain ranges: northern, western, southern and central and eastern ranges. The northern mountain ranges have extended from Ararat Mountain in Turkey to Hindu Kush Mountain in Afghanistan, including Alamdar, Sahand, Sabalan, Talesh, Qafan Kuh mountains in Azarbayejan, Albourz mountain ranges at the north of Tehran and south of Mazandaran and

Gilan Ostans, Ala Dagh, Binalud, Hezar Masjed and Qarah Dagh in east of Iran.

The mountain ranges in the west, which have extended from Ararat Mountain to the north west and the south east of the country, cover Sari Dash, Chehel Cheshmeh, Panjeh Ali, Alvand, Bakhtiyari mountains, Pish Kuh, Posht Kuh, Oshtoran Kuh and Zard Kuh and form Zagros ranges. The highest peak of this range is "Dena" with a 4409 m height.

Southern mountain range stretches from Khuzestan province to Sistan & Baluchestan province and joins Soleyman Mountains in Pakistan. The mountain range includes Sepidar, Meymand, Bashagard and Bam Posht mountains. Central and eastern mountains mainly comprise Karkas, Shir Kuh, Kuh Banan, Jebal Barez, Hezar, Bazman and Taftan mountains, the highest of which is Hezar mountain with a 4465 m height.

The largest Iranian islands that are mainly located at Persian Gulf and Hormuz Strait, are Qeshm, Kish, Lavan, Larak Shahri, Hormuz, Hengam Jadid (new Hengam), Kabudan, Ashk (Orumiyeh Lake), Faroor Bozorg (Greater Faroor), Hendurabi, Khark, Minou, Siri, Khan, Abu Mosa, Espir (Orumiyeh Lake), Tonb Bozorg (Greater Tonb), Morghi, Kharku, Arezoo, (Orumiyeh Lake), Faroor Kuchak (Small/Lesser Faroor) and Tunb Kuchak (Small/Lesser Tonb).

The Caspian Sea (the world's largest lake) lies on the north of Iran and connects Iran to European countries through Russian waterways. The water of the most of the Iranian lakes is salty. The major internal lakes are: Orumiyeh, Namak, Hamoun Jazmourian, Hamoun-e-Saberi,

Bakhtegan, Toshak, Hamoun-e-Pouzak, Maharlu, Hamoun-e-Hirmand, Talab-e-Anzali (Anzali lagoon), Howz-e-Sultan, Parishan and Zarivar of Marivan.

## 2. Climate

Due to its vast area, abundant mountains, desert lands and being adjacent to two large seas at the north and south as well as its closeness to Europe, Mediterranean Sea, African large Sahara desert, Indian Ocean, Asian internal highlands and large cold areas, Iran enjoys a very diverse climate. The effect of distance from the sea, namely closeness and remoteness from the sea, can be easily perceived by comparing the large amount of rainfall and rich vegetation and highly populated areas around the Caspian Sea with the uninhabited arid deserts in the centre of Iran. The continuation of the mountain ranges, their location opposite or parallel to the winds direction and air flows are among the factors, which always affect climate change. There is a significant difference among the slopes facing or backing onto humid winds in terms of rainfall amount and vegetation.

The country generally features three climatic zones:

1. **Arid and semi-arid climate** of the interior and far south, characterized by long, warm and dry periods, lasting some years over 7 months. The annual precipitation in such regions varies between 30 to 250 mm.

2. **Mountainous climate**, which are sub-divided into cold and moderate mountainous climate.

2.1. **Cold mountainous climate**: about 40000 sq km of the total country consists of major highlands, including Alborz and Zagross mountain ranges, as well as Sahand and Sabalan

high peaks. The annual precipitation in these regions exceeds 500 mm.

2.2. **Moderate mountainous climate**: some 300000 sq km of the country enjoys moderate mountainous climate, where the annual precipitation varies from 250 to 600 mm.

3. **Caspian climate**, which is a narrow strip with a limited extension, trapped between the Caspian Sea and Alborz mountains range with as much as 600 to 2000 mm precipitation per annum.

Measurement of climatic characteristics, which dates back to the year 1320, is currently performed by the National Meteorological Organization at its numerous synoptic stations scattered around the country. The data in this chapter, however, are only from those located in Ostan (provincial) centres. They include temperature, precipitation, and relative humidity, the number of frosty days, hours of bright sunshine and speed of wind.

## Notes:

1. Some capitals of Ostans have several synoptic stations and the data appeared here are from those located at the airports of Ostan's capitals.

2. Central basins, Hamun and Sarakhs, were renamed Central Plateau, Eastern Border, and Qareh Qumbasins, respectively in the year 1383. The Statistics in this Chapter have been gathered from the Armed Forces Geographical Organization, Ministry of Interior, I.R. of Iran Meteorological Organization and Iran Water Resource Management Company.

## Definitions and concepts

**Shahrestan (subprovince)**: an administrative division with a certain geographical boundary, formed from joining of a few neighboring

Bakhshes(county) which enjoy homogeneous natural, social, economic, political and cultural conditions.

**Bakhsh (county):** an administrative division with a specific geographical boundary, including a number of neighboring Dehestans and their adjacent fields, places, Roostas (hamlets), and possibly Shahrs (cities), which are similar in natural, social, cultural, economic and political aspects.

**Shahr (city/town):**an area with a legal boundary, located within the geographical boundary of a certain Bakhsh and in terms of constructional context, employment and other factors, having the distinctive features of a city.

**Dehestan (rural agglomeration):** the smallest unit among administrative divisions with a specific geographical boundary, comprised of a number of neighboring Roostas and their adjacent places and fields, homogeneous in environment, economic and social conditions that allow for providing public services and planning within a single system and network.

**Synoptic stations (simultaneous meteorological reporting stations):** These are stations at which, various climatic features including dry and humid temperatures, amount and type of cloud, amount of precipitation, type of climatic phenomenon, direction and speed of wind, amount of evaporation, air pressure, hours of bright sunshine, changes in pressure, amount of solar radiation, etc. are according to certain instructions at certain hours measured and communicated to meteorological centers across the globe by devices like SSB, telephone or telex after being registered.

**Absolute minimum:** the lowest temperature during a certain period (24 hours, one month,

one year, or a few years).

**Absolute maximum:**the highest temperature during a certain period (24 hours, one month, one year, or a few years).

**Relative humidity:** the amount of humid air in a volume unit of air.

**Average height of precipitation:** is the weighted mean of an area. By dividing the area into several polygons and considering the precipitation in each polygon, the average height of precipitation is calculated.

**Water basin:** is a geographical area in which overland flows from, and drains downhill into a body of water, such as ocean, sea, or flat. If the concentration point is located inside the basin, the basin is a closed one (e.g. Orumiyeh Lake), but if the point is located at the end of the basin, so that the flow can leave there, then there is an open basin. Every given point in a river is considered the concentration point for the basin just above it.

**Aquatic year:** from the first day of Mehr to the end of Shahrivar of the next year.

**Coefficient of overland flow:** the ratio of the volume of water flowed in a given hydrometric station to the volume of the precipitation of the basin stretching to the station.

**Hydrometric stations:** stations in which parameters of debit (discharge), sediment, temperature, physical properties of water and features of ice cover and chemical properties of rivers, lake and dams reservoir are observed and measured.

**Volume of overland flow:** To estimate the volume of overland flow of each of the country's main basins, a total of 42 rivers have been selected to indicate and represent the overland flow whose annual total volume exceeds 60

percent of the country's grand total. To reach the volume of any individual flow, a proper coefficient is applied to the total volume.

### *Selected information*

The total length of the I.R. Iran's borderlines is 8640 kilometers out of which the longest borderline is for that of south waters with 2106 kilometers and the shortest one goes to Iran-Armenia which equals 45 kilometers.

In the year 1393, Sistan & Baluchestan, Kerman, South Khorasan, Fars, Khorasan-e-Razavi and Esfahan were among the largest provinces in the country, respectively, and each of them has an area of more than 100000Km<sup>2</sup>. Tehran province with an area of about 14000Km<sup>2</sup> ranks 29th among the national provinces.

In the year 1393, I.R. Iran was divided into 31 Ostans (provinces), 428 Shahrestans (sub-provinces), 1058 Bakhshes (counties), 1243 Shahrs (cities) and 2589 Dehestans (rural agglomerations).

In the year 1393 average maximum and minimum temperatures in Ostans' centers belong to Bandar Abbas with 27.2 °C and Ardebil with 10.2 °C respectively. Furthermore, the absolute maximum belongs to Ahvaz with 50.6 °C and the absolute minimum goes to Ardebil with -18.8 °C. Also in the said year, the highest annual precipitation of the country belongs to Rasht and Sari, which amounted to 1318 and 641mm, respectively, and Yazd and Zahedan with 43 and 68 mm respectively had the lowest annual precipitation amongst all Ostans centres. In the year 1393, the maximum frosty days belong to Shahr-e-Kord with 131 days, Orumiyeh with 116 days and Qazvin with 110 days; and Ahvaz, Bandar Abbas and Bushehr have not experienced

any frosty day.

The volume of precipitation in national main basins during the aquatic year of 1392-93 was approximately 357.175 bln m<sup>3</sup> out of which the share of each basin is as follows: the Caspian Sea :63.969 bln m<sup>3</sup>, the Persian Gulf and Oman Sea 141.775 bln m<sup>3</sup>, the Lake of Orumiyeh: 14.635 bln m<sup>3</sup>, Central Plateau:118.303 bln m<sup>3</sup>, Eastern Border:10.484 bln m<sup>3</sup> & Qareh Qum 8.009 bln m<sup>3</sup>.

It is also noteworthy that the ratio of the area of main water basins to the total country area is as follows: the Caspian Sea 11.00%, the Persian Gulf and Oman Sea:26.00%, Lake of Orumiyeh 3.00%, Central Plateau:51.00%, Eastern Border 6.00 % and Qareh Qum:3.00%.

**1.1. LENGTH OF IRANIAN BORDERLINES: THE 1393****(km)**

Discription	Length of Bordelines
<b>Total</b> .....	<b>8640</b>
Iran-Iraq borderline .....	1608
Iran- Turkey borderline .....	566.1
Iran- Turkmenistan borderline.....	1190
Iran- Azerbaijan borderline.....	756.8
Iran- Armenia border.....	45
Northern coastline.....	524
Iran- Afghanistan borderline.....	919.1
Iran- Pakistan borderline.....	924.8
Southern coastline.....	2106

Source: Armed Forces Geographical Organization.

**1.2. LONGITUDE AND LATITUDE OF OSTANS, THE YEAR 1393**

Ostan	Longitude				Latitude			
	Lower limit		Upper limit		Lower limit		Upper limit	
	Minute	Degree	Minute	Degree	Minute	Degree	Minute	Degree
<b>Total country</b> .....	<b>2</b>	<b>44</b>	<b>19</b>	<b>63</b>	<b>4</b>	<b>25</b>	<b>46</b>	<b>39</b>
East Azarbayejan .....	5	45	21	48	45	36	26	39
West Azarbayejan.....	2	44	24	47	58	35	46	39
Ardebil .....	18	47	55	48	6	37	42	39
Esfahan .....	38	49	30	55	42	30	30	34
Alborz.....	10	50	28	51	33	35	21	36
Ilam .....	41	45	3	48	3	32	2	34
Bushehr.....	6	50	56	52	18	27	17	30
Tehran.....	21	50	9	53	52	34	8	36
Chaharmahal & Bakhtiyari.....	30	49	26	51	9	31	49	32
South Khorasan .....	23	55	56	60	31	30	6	35
Khorasan-e-Razavi .....	14	56	16	61	51	33	42	37
North Khorasan .....	54	55	25	58	35	36	17	38
Khuzestan .....	40	47	33	50	53	29	0	33
Zanjan .....	10	47	26	49	33	35	15	37
Semnan .....	50	51	3	57	14	34	20	37
Sistan & Baluchestan.....	50	58	19	63	4	25	29	31
Fars .....	36	50	35	55	3	27	40	31
Qazvin.....	44	48	51	50	24	35	49	36
Qom .....	5	50	58	51	9	34	11	35
Kordestan .....	33	45	15	48	44	34	28	36
Kerman .....	20	54	34	59	29	26	58	31
Kermanshah .....	24	45	6	48	41	33	17	35
Kohgiluyeh & Boyerahmad .....	53	49	53	51	56	29	29	31
Golestan .....	51	53	19	56	30	36	7	38
Gilan .....	34	48	36	50	34	36	27	38
Lorestan .....	50	46	1	50	39	32	23	34
Mazandaran .....	21	50	8	54	46	35	58	36
Markazi .....	57	48	3	51	23	33	34	35
Hormozgan .....	44	52	14	59	25	25	53	28
Hamedan .....	48	47	28	49	0	34	44	35
Yazd .....	48	52	39	56	36	29	22	33

Source: Armed Forces Geographical Organization.

### 1.3. NUMBER OF SHAHRESTANS, BAKHSSES, CITIES AND DEHESTANS ACCORDING TO THE ADMINISTRATIVE DIVISIONS

Year	Number of Shahrestans	Number of Bakhshes	Number of cities	Number of Dehestans
1375 .....	265	707	678	2227
1380 .....	299	794	889	2305
1385 .....	336	889	1015	2400
1389 .....	397	982	1144	2496
1390 .....	400	994	1166	2507
1391 .....	422	1041	1224	2566
1392 .....	428	1058	1242	2589
<b>1393 .....</b>	<b>428</b>	<b>1058</b>	<b>1243</b>	<b>2589</b>

*Source Ministry of the Interior.*



#### 1.4. GENERAL CHARACTERISTICS OF OSTANS ACCORDING TO THE ADMINISTRATIVE DIVISIONS AT THE END OF THE YEAR 1393

Ostan	Capital of Ostan	Area <sup>(1)</sup> (sq km)	Number of Shahrestans	Number of Bakhshes	Number of cities	Number of Dehestans
<b>Total country</b> .....	xx	<b>1628792</b>	<b>428</b>	<b>1058</b>	<b>1243</b>	<b>2589</b>
East Azarbayejan .....	Tabriz	45637	20	44	62	142
West Azarbayejan.....	Orumiyeh	37411	17	40	42	113
Ardebil.....	Ardebil	17813	10	29	26	71
Esfahan .....	Esfahan	107017	24	51	106	129
Alborz.....	Karaj	5173	6	13	17	29
Ilam.....	Ilam	20132	10	26	25	49
Bushehr.....	Bushehr	22764	10	25	37	48
Tehran.....	Tehran	13640	16	33	43	71
Chaharmahal & Bakhtiari.....	Shahr-e-Kord	16336	9	25	40	50
South Khorasan.....	Birjand	150797	11	25	28	61
Khorasan-e-Razavi .....	Mashhad	118851	28	70	72	164
North Khorasan.....	Bojnurd	28434	8	19	22	45
Khuzestan .....	Ahvaz	64019	27	67	77	142
Zanjan.....	Zanjan	21773	8	17	21	48
Semnan .....	Semnan	97490	7	15	20	31
Sistan & Baluchestan.....	Zahedan	181785	19	48	37	112
Fars .....	Shiraz	122604	29	84	102	205
Qazvin.....	Qazvin	15567	6	19	25	46
Qom .....	Qom	11526	1	5	6	9
Kordestan.....	Sanandaj	29136	10	31	29	86
Kerman .....	Kerman	180725	23	58	71	151
Kermanshah.....	Kermanshah	25009	14	31	32	86
Kohgiluyeh & Boyerahmad.....	Yasuj	15519	8	19	17	45
Golestan.....	Gorgan	20367	14	27	29	60
Gilan .....	Rasht	14041	16	43	52	109
Lorestan .....	Khorramabad	28293	11	31	25	87
Mazandaran .....	Sari	23841	22	56	58	131
Markazi.....	Arak	29126	12	23	33	66
Hormozgan .....	BandarAbbas	70712	13	38	39	85
Hamedan.....	Hamedan	19367	9	25	29	73
Yazd.....	Yazd	73872	10	21	21	45

1. Only land area.

Source: Ministry of the Interior.

### ADMINISTRATIVE DIVISIONS, THE YEAR 1393



**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT END OF THE YEAR 1393**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
<b>Total country</b> .....	<b>1058</b>	<b>1243</b>	<b>2589</b>
<b>East Azarbayejan</b> .....	<b>44</b>	<b>62</b>	<b>142</b>
Azarshahr.....	3	4	7
Osku.....	2	3	5
Ahar.....	2	2	9
Bostanabad.....	2	2	9
Bonab.....	1	1	3
Tabriz.....	2	4	6
Jolfa.....	2	3	5
Charoimaq.....	2	1	6
Khoda Afarien.....	3	1	7
Sarab.....	2	4	9
Shabestar.....	3	9	8
Ajabshir.....	2	2	4
Kaleibar.....	2	2	7
Maragheh.....	2	2	6
Marand.....	2	5	9
Malekan.....	2	3	5
Miyaneh.....	4	5	17
Varzaqan.....	2	2	7
Haris.....	2	5	6
Hashtrud.....	2	2	7
<b>West Azarbayejan</b> .....	<b>40</b>	<b>42</b>	<b>113</b>
Orumiyeh.....	5	5	20
Oshnaviyeh.....	2	2	4
Bukan.....	2	2	7
Poldasht.....	2	2	4
Piranshahr.....	2	2	5
Takab.....	2	1	6
Chaldoran.....	2	2	5
Chaypareh.....	2	1	4
Khoy.....	4	6	11
Sardasht.....	2	3	6
Salmas.....	2	2	7
Shahindezh.....	2	3	5
Shout.....	2	2	4
Maku.....	2	2	5
Mahabad.....	2	2	5
Miandoab.....	3	3	11
Naqadeh.....	2	2	4

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
<b>Ardebil</b> .....	<b>29</b>	<b>26</b>	<b>71</b>
Ardebil .....	3	2	10
Bilehsavar .....	2	2	4
Parsabad.....	4	4	8
Khalkhal.....	3	3	8
Sareyn .....	2	1	4
Kowsar.....	2	1	4
Garmi .....	3	2	9
Meshkinshahr.....	5	6	12
Namin .....	3	3	7
Nayer .....	2	2	5
<b>Esfahan</b> .....	<b>51</b>	<b>106</b>	<b>129</b>
Aran & Bidgol .....	2	4	3
Ardestan.....	2	3	7
Esfahan .....	6	14	19
Borkhar .....	2	7	4
Buin and Miyandasht.....	2	2	5
Tiran & Karvan.....	2	3	4
Chadegan .....	2	2	4
Khomeinishahr .....	1	4	3
Khansar .....	1	1	3
Khour& Biyabanak.....	1	3	3
Dehaghan .....	1	2	3
Semirom.....	4	4	8
Shahin Shahr& Meymeh .....	2	6	4
Shahreza.....	1	2	4
Faridan .....	2	2	5
Fereydunshahr .....	1	2	5
Falavarjan .....	3	8	6
Kashan .....	4	7	9
Golpayegan.....	1	3	3
Lenjan .....	3	9	7
Mobarakeh.....	2	5	5
Naeen .....	2	3	5
Najafabad.....	2	6	5
Natanz.....	2	4	5
<b>Alborz</b> .....	<b>13</b>	<b>17</b>	<b>29</b>
Eshtehard .....	2	1	4
Savojbalagh .....	3	5	6
Taleghan .....	2	1	4
Fardis .....	2	2	4
Karaj .....	2	6	6
Nazarabad .....	2	2	5
<b>Ilam</b> .....	<b>26</b>	<b>25</b>	<b>49</b>

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Abdanan.....	3	3	6
Ilam.....	3	2	6
Ivan.....	2	2	4
Badreh.....	2	1	4
Chardavel.....	4	5	7
Darrehshahr.....	2	2	4
Dehloran.....	4	4	8
Sirvan.....	2	1	4
Malekshahi.....	2	3	4
Mehran.....	2	2	2
<b>Bushehr.....</b>	<b>25</b>	<b>37</b>	<b>48</b>
Bushehr.....	2	4	2
Tangestan.....	2	3	4
Jam.....	2	3	5
Dashtestan.....	6	9	12
Dashti.....	3	4	7
Dayyer.....	3	5	6
Deylam.....	2	2	4
Asalouye.....	2	2	4
Kangan.....	1	3	2
Genaveh.....	2	2	2
<b>Tehran.....</b>	<b>33</b>	<b>43</b>	<b>71</b>
Eslamshahr.....	3	2	6
Baharestan.....	2	3	4
Pakdasht.....	2	3	6
Pardis.....	2	2	4
Pishva.....	2	1	4
Tehran.....	3	1	4
Damavand.....	2	5	5
Robotkarim.....	1	3	3
Rey.....	5	4	9
Shemiranat.....	2	4	3
Shahriar.....	1	7	6
Firuzkuh.....	2	2	5
Qods.....	1	1	2
Qarchak.....	1	1	2
Malard.....	2	2	4
Varamin.....	2	2	4
<b>Chaharmahal &amp; Bakhtiari.....</b>	<b>25</b>	<b>40</b>	<b>50</b>
Ardal.....	2	4	4
Borujen.....	3	6	5
Bon.....	2	2	4
Saman.....	2	1	4
Shahr-e-Kord.....	3	9	6
Farsan.....	3	6	5
Kuhrang.....	3	3	7
Keyar.....	2	4	4
Lordegan.....	5	5	11
<b>South Khorasan.....</b>	<b>25</b>	<b>28</b>	<b>61</b>
Boshroye.....	2	2	4

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Birjand.....	<i>1</i>	<i>1</i>	<i>6</i>
Khosaf .....	2	2	5
Darmiyan.....	3	4	6
Zeerkooch .....	3	2	6
Sarayan.....	2	3	4
Sarbisheh.....	3	2	6
Tabas .....	3	3	8
Ferdows .....	1	2	3
Qayenat .....	3	5	8
Nahbandan .....	2	2	5
<b><i>Khorasan-e-Razavi</i></b> .....	<b><i>70</i></b>	<b><i>72</i></b>	<b><i>164</i></b>
Bakharz .....	2	1	4
Bajestan.....	2	2	4
Bardeskan.....	3	3	6
Binalood.....	2	2	4
Taybad.....	2	3	4
Torbat-e-Jam .....	5	5	13
Torbat-e-Heydariyeh .....	4	4	8
Joghatay .....	2	1	4
Jovin.....	2	1	4
Chenaran .....	2	2	5
Khalil Abad.....	2	2	4
Khaf.....	4	5	8
Khooshab .....	2	1	5
Davarzan .....	2	1	4
Dargaz .....	4	4	7
Rashtkhar .....	2	2	4
Zaveh.....	2	1	4
Sabzevar .....	3	3	11
Serakhs .....	2	2	6
Fariman .....	2	4	5
Firooze <sup>(1)</sup> .....	2	2	4
Quchan .....	2	2	5
Kashmar .....	2	2	5
Kalat.....	2	2	4
Gonabad .....	2	3	4
Mashhad.....	3	3	11
Mah-Velat .....	2	2	4
Neyshabur .....	4	7	13
<b><i>North Khorasan</i></b> .....	<b><i>19</i></b>	<b><i>22</i></b>	<b><i>45</i></b>
Esfarayen.....	2	2	7
Bojnurd.....	2	3	5
Jajarm.....	3	3	5
Raz & Jargalan.....	3	1	6
Shirvan .....	3	4	9
Faruj.....	2	2	5

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Garmeh .....	1	3	2
Maneh and Samalqan .....	3	4	6
<b>Khuzestan.....</b>	<b>67</b>	<b>77</b>	<b>142</b>
Abadan .....	2	3	6
Aghajaree .....	2	1	2
Omidiyeh.....	2	2	3
Endika.....	3	2	6
Andimeshk .....	2	5	4
Ahvaz .....	3	2	6
Izeh.....	3	2	10
Baghmalek.....	3	4	8
Bavi .....	2	3	4
Bandar-e-Mahshahr .....	2	3	1
Behbahan.....	3	4	6
Hamidiyeh .....	2	1	4
Khorramshahr.....	2	3	4
Dezful .....	4	9	11
Dasht-e-Azadegan .....	2	4	5
Ramshir .....	2	2	4
Ramhormoz .....	4	1	8
Shadegan.....	3	3	8
Shush.....	3	5	7
Shushtar.....	3	4	6
Karoun.....	2	1	4
Gotvand .....	2	5	4
Lali .....	2	1	4
Masjed Soleyman .....	3	2	6
Haftgol.....	2	1	3
Hendiĵan .....	2	2	4
Hovayzeh.....	2	2	4
<b>Zanjan.....</b>	<b>17</b>	<b>21</b>	<b>48</b>
Abhar.....	1	3	5
Ijerud .....	2	2	4
Khodabandeh.....	4	7	10
Khorramdarreh .....	1	1	2
Zanjan.....	3	3	13
Soltanieh.....	2	1	4
Tarom .....	2	2	5
Mahneshan .....	2	2	5
<b>Semnan .....</b>	<b>15</b>	<b>20</b>	<b>31</b>
Aradan .....	2	2	4
Damghan .....	2	4	6
Semnan .....	2	2	3
Shahrud.....	3	6	7
Garmsar .....	2	2	3
Mehdishahr.....	2	3	3
Mayamee .....	2	1	5
<b>Sistan &amp; Baluchestan.....</b>	<b>48</b>	<b>37</b>	<b>112</b>
Iranshahr .....	3	4	7
Chabahař.....	3	2	6
Khash.....	3	2	11
Delgan .....	2	1	5
Zabol.....	1	2	1

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Zahedan .....	3	2	6
Zahak .....	2	1	4
Saravan .....	3	5	8
Sarbaz .....	4	3	11
Sibsavarani.....	2	2	4
Fonuch .....	2	1	4
Ghaser-e Ghand .....	3	1	6
Konarak .....	2	2	4
Mehrestan .....	2	1	4
Mirjave.....	3	1	7
Neekshahr .....	4	3	11
Neemrooz.....	2	1	4
Hamoon .....	2	2	4
Hirmand.....	2	1	5
<b>Fars .....</b>	<b>84</b>	<b>102</b>	<b>205</b>
Abadeh.....	1	5	4
Arsanjan.....	1	1	3
Estahban.....	2	3	3
Eqlid .....	3	4	9
Bavanat .....	3	4	7
Pasargad.....	2	2	4
Jahrom .....	4	5	12
Kharameh.....	2	2	5
Khorrambid.....	2	2	3
Khonj .....	2	1	4
Darab .....	4	4	12
Rostam.....	2	2	4
Zarrindasht.....	2	3	5
Sepidan .....	3	3	8
Sarvestan.....	2	2	4
Shiraz .....	3	6	12
Farashband.....	2	3	4
Fasa.....	4	6	8
Firuzabad .....	2	2	5
Qirokarzin.....	2	5	5
Kazerun.....	6	6	14
Kavar .....	2	1	4
Gerash.....	2	1	4
Larestan .....	6	8	13
Lamerd.....	4	4	8
Marvdasht .....	5	5	15
Mamasani.....	3	3	9
Mohr .....	4	5	8
Neyriz .....	4	4	9
<b>Qazvin.....</b>	<b>19</b>	<b>25</b>	<b>46</b>
Abyek.....	2	2	5
Avaj .....	2	2	5
Alborz.....	2	4	4
Boyinzahra.....	4	5	9



**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Takestan .....	4	5	9
Qazvin .....	5	7	14
<i>Qom</i> .....	<b>5</b>	<b>6</b>	<b>9</b>
Qom .....	5	6	9
<i>Kordestan</i> .....	<b>31</b>	<b>29</b>	<b>86</b>
Baneh .....	4	4	8
Bijar .....	3	5	11
Dehgalan .....	2	2	5
Divandarreh .....	3	2	8
Sarvabad .....	2	2	8
Saqez .....	4	2	11
Sanandaj .....	4	2	12
Qorveh .....	4	4	10
Kamyaran .....	2	2	7
Marivan .....	3	4	6
<i>Kerman</i> .....	<b>58</b>	<b>71</b>	<b>151</b>
Arzooeyeh .....	2	1	5
Anar .....	1	2	2
Baft .....	2	2	6
Bardsir .....	4	5	8
Bam .....	2	2	4
Jiroft .....	4	4	14
Rabar .....	2	2	4
Ravar .....	2	2	3
Rafsanjan .....	4	5	14
Rudbar-e-Jonub .....	2	2	4
Reegan .....	2	2	4
Zarand .....	2	4	11
Sirjan .....	5	7	10
Shahr-e-Babak .....	2	5	9
Anbarabad .....	2	3	7
Faryab .....	2	1	4
Fahraj .....	2	1	4
Ghaleh-Ganj .....	2	1	5
Kerman .....	6	13	16
Kohbonan .....	2	2	3
Kahnuj .....	2	1	5
Manujan .....	2	2	5
Narmashir .....	2	2	4
<i>Kermanshah</i> .....	<b>31</b>	<b>32</b>	<b>86</b>
Eslamabad-E-Gharb .....	2	2	7
Paveh .....	3	5	5
Salas-e-Babajani .....	2	2	4
Javanrud .....	2	1	4
Dalahu .....	2	3	5
Ravansar .....	2	2	6

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Sar-e-pol-e-Zahab.....	2	1	8
Sonqor.....	2	2	8
Sahneh.....	2	2	7
Qasr-e-Shirin.....	2	2	4
Kermanshah.....	5	4	13
Kangavar.....	1	2	5
Gilan-e-Gharb.....	2	2	6
Harsin.....	2	2	4
<b>Kohgiluyeh &amp; Boyerahmad.....</b>	<b>19</b>	<b>17</b>	<b>45</b>
Basht.....	2	1	4
Bahmaee.....	2	1	4
Boyerahmad.....	4	5	11
Cheram.....	2	2	4
Dena.....	2	2	4
Kohgiluyeh.....	4	4	10
Gachsaran.....	1	1	4
Lande.....	2	1	4
<b>Golestan.....</b>	<b>27</b>	<b>29</b>	<b>60</b>
Azadshahr.....	2	3	4
Aq Qala.....	2	2	5
Bandar Gaz.....	2	2	4
Torkaman.....	2	1	4
Ramyar.....	2	4	4
Aliabad.....	2	4	4
Kordkuy.....	1	1	3
Kalaleh.....	2	2	5
Galikesh.....	2	1	4
Gorgan.....	2	3	5
Gomishan.....	2	2	4
Gonbad-e-Kavus.....	2	2	6
Marave-Tapeh.....	2	1	4
Minudasht.....	2	1	4
<b>Gilan.....</b>	<b>43</b>	<b>53</b>	<b>109</b>
Astara.....	2	2	4
Astane-ye-Ashrafiyeh.....	2	2	6
Amlash.....	2	2	5
Bandar Anzali.....	1	1	2
Rasht.....	6	7	18
Rezvanshahr.....	2	2	4
Rudbar.....	4	7	10
Rudsar.....	4	5	10
Siahkal.....	2	2	5
Shaft.....	2	2	4
Sumaehsara.....	3	3	7
Tavalesh.....	4	5	10

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Fuman .....	2	4	6
Lahijan .....	2	2	7
Langrud .....	3	5	7
Masal .....	2	2	4
<b><i> Lorestan</i></b> .....	<b>31</b>	<b>25</b>	<b>87</b>
Azna .....	2	2	4
Aligudarz .....	5	2	12
Borujerd .....	2	2	7
Poldokhtar.....	2	2	7
Khorramabad .....	4	4	17
Delfan .....	3	2	10
Dorud .....	2	2	5
Doreh .....	3	2	6
Rumeshkan .....	2	1	4
Selseleh.....	2	2	6
Kuhdasht .....	4	4	9
<b><i> Mazandaran</i></b> .....	<b>56</b>	<b>58</b>	<b>131</b>
Amol .....	5	5	11
Babol.....	6	7	13
Babolsar .....	3	3	6
Behshahr .....	2	3	5
Tonkabon .....	3	4	7
Juybar.....	2	2	4
Chalus .....	2	3	4
Ramsar .....	1	2	4
Sari.....	6	4	15
Savadkuh .....	2	3	4
Savadkuh-e Shomali .....	2	1	4
Seemorgh.....	2	1	4
Abbasabad .....	3	3	5
Ferydonkenar .....	2	1	4
Qaemshahr .....	1	2	5
Kelardasht.....	1	1	2
Galugah.....	2	1	4
Mahmoudabad .....	2	2	5
Miandorood .....	2	1	5
Neka.....	2	1	5
Nur.....	3	5	9
Noshahr.....	2	3	6
<b><i> Markazi</i></b> .....	<b>23</b>	<b>33</b>	<b>66</b>
Ashtian.....	1	1	3
Arak .....	3	4	11
Tafresh.....	1	1	4
Khomein .....	2	2	7
Khondab.....	2	2	5
Delijan .....	1	2	4

**1.5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF THE YEAR 1393 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Zarandiyeh.....	2	5	6
Saveh.....	2	4	7
Shazand.....	4	6	9
Farahan.....	2	2	4
Komeijan.....	2	2	4
Mahallat.....	1	2	2
<b>Hormozgan.....</b>	<b>38</b>	<b>39</b>	<b>85</b>
Abumusa.....	2	1	2
Bastak.....	3	3	7
Bashagerd.....	3	2	6
Bandar Abbas.....	4	5	11
Bandar Lengeh.....	4	5	8
parsiyan.....	2	3	4
Jask.....	2	1	5
Hajiabad.....	3	3	6
Khamir.....	2	2	4
Rudan.....	4	3	10
Sireek.....	2	3	4
Qeshm.....	3	4	7
Minab.....	4	4	11
<b>Hamedan.....</b>	<b>25</b>	<b>28</b>	<b>73</b>
Asadabad.....	2	2	6
Bahar.....	3	3	6
Tuyserkhan.....	2	3	7
Razan.....	3	3	7
Famenin.....	2	1	4
Kabudarahang.....	3	3	10
Malayer.....	4	5	15
Nahavand.....	4	4	9
Hamedan.....	2	4	9
<b>Yazd.....</b>	<b>21</b>	<b>21</b>	<b>45</b>
Abarkuh.....	2	2	4
Ardakan.....	3	3	5
Ashkzar.....	2	2	2
Bafgh.....	1	1	3
Behabad.....	2	1	3
Taft.....	3	2	10
Khatam.....	2	2	4
Mehriz.....	1	1	5
Meybod.....	3	3	5
Yazd.....	2	4	4

*1. Takhte JolgeShahrastan was renamed "Firooze".*

*Source: Ministry of the Interior.*

**1.6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS  
FROM THE YEAR OF ESTABLISHMENT TO THE END OF THE YEAR 1390**

Capital of Ostan	Year of the establishment	Station characteristics						Height from the sea level
		Geographic longitude and latitude						
		East longitude			North latitude			
		Second	Minute	Degree	Second	Minute	Degree	
Arak.....	1328	0	47	49	19	4	34	1702.8
Ardebil .....	1355	43	19	48	5	13	38	1335.2
Orumiyeh .....	1330	19	3	45	31	39	37	1328
Esfahan.....	1330	22	42	51	3	31	32	1550
Ahvaz .....	1330	39	44	48	41	20	31	22.5
Ilam .....	1361	52	23	46	16	35	33	1337
Bojnurd.....	1355	12	18	57	14	29	37	1112
Bandar Abbas .....	1335	22	22	56	53	12	27	9.8
Bushehr .....	1330	16	49	50	14	54	28	6
Birjand.....	1334	1	17	59	26	53	32	1491
Tabriz .....	1327	33	14	46	20	7	38	1345
Tehran .....	1321	34	18	51	36	41	35	1191
Khorramabad.....	1328	1	17	48	20	26	33	1147.8
Rasht .....	1334	27	37	49	21	19	37	24.8
Zahedan.....	1330	1	54	60	20	28	29	1370
Zanjan .....	1335	18	31	48	37	39	36	1659.4
Sari .....	1378	12	59	52	12	32	36	23
Semnan.....	1342	17	25	53	18	35	35	1127
Sanandaj.....	1338	53	0	47	16	15	35	1373.4
Shahr-e-Kord.....	1334	22	50	50	14	54	28	2050
Shiraz .....	1336	9	36	52	41	33	29	1488
Qazvin .....	1334	41	3	50	42	15	36	1279.1
Qom.....	1364	19	51	53	29	46	34	879.1
Karaj.....	1352	14	57	50	25	48	35	1292.9
Kerman.....	1328	45	57	56	22	15	30	1754
Kermanshah .....	1321	12	9	47	8	21	34	1318.5
Gorgan.....	1331	49	24	54	18	54	36	0
Mashhad.....	1328	52	37	59	11	14	36	999
Hamedan .....	1354	5	32	48	10	52	34	1740.8
Yasuj .....	1365	18	33	51	55	41	30	1816.3
Yazd .....	1331	23	31	48	37	39	36	1230.2

**1.6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS  
FROM THE YEAR OF ESTABLISHMENT TO THE END OF THE YEAR 1390 (continued)**

Capital of Ostan	Air temperture (°C)					Average annual precipitation (mm)	Max. daily precipitation (mm)
	Average Max	Average min	Highest max	Lowest Min	Mean		
Arak.....	20.8	7.1	44	-30.5	14	337.1	80
Ardebil .....	15.6	3.1	39.8	-33.8	9.3	295.5	63
Orumiyeh .....	17.8	5.5	39.2	-22.8	11.6	338.9	79
Esfahan.....	23.5	9.1	43	-19.4	16.3	125	48
Ahvaz .....	33.2	17.9	54	-7	25.6	209.2	107
Ilam .....	22.6	11.4	41.4	-13.6	17	583.7	162
Bojnurd.....	19.9	7	42.3	-25	13.4	267.8	54.3
Bandar Abbas.....	32.2	21.9	51	2	27	176.1	211
Bushehr .....	28.3	21.5	47	4	24.9	268	150
Birjand.....	24.7	8.5	44	-21.5	16.6	168.5	52
Tabriz .....	18.2	7	42	-25	12.6	283.8	63
Tehran .....	22.8	12	43	-15	17.4	232.7	50
Khorramabad.....	25.3	9.1	47	-14.6	17.2	504.3	78
Rasht .....	21.1	11.8	37.5	-13.6	16.4	1337.5	170
Zahedan.....	26.9	10.2	43	-22	18.5	89.3	62
Zanjan .....	18.2	4.1	43	-30	11.2	311.1	50.6
Sari .....	22	11.6	46	-11	16.8	738.9	77.2
Semnan.....	23.9	12.5	44	-12.6	18.2	140.7	41
Sanandaj.....	21.6	5.6	44	-31	13.6	449.9	73
Shahr-e-Kord.....	20.2	3.3	42	-32.4	11.8	321.8	88.8
Shiraz .....	25.8	9.9	43.2	-14	17.8	334.7	128
Qazvin .....	21.3	6.9	43	-24	14.1	314.4	50
Qom.....	25.8	10.9	46	-23	18.3	148.2	43
Karaj.....	21.3	8.8	42	-17	15.1	251.7	57
Kerman.....	24.8	7	42	-30	15.9	148	60
Kermanshah .....	22.8	6.1	44.1	-27	14.5	439.2	108
Gorgan.....	22.8	12.8	45	-11.8	17.8	583.8	105
Mashhad.....	21.2	7.3	43.8	-28	14.3	251.5	52
Hamedan .....	19.4	3.5	40	-32.8	11.5	317.7	56
Yasuj .....	22.5	7.9	40.4	-19	15.2	823.3	135
Yazd .....	26.6	11.9	45.6	-16	19.3	59.2	48

**1.6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS  
FROM THE YEAR OF ESTABLISHMENT TO THE END OF THE YEAR 1390 (continued)**

Capital of Ostan	Mean of relative humidity (%)		Average number of frosty days	Average total bright sunshine (hours )	Max. wind speed (mps)
	Max.	Min.			
Arak .....	63	31	79	2759.8	28
Ardebil .....	90	53	113	2359.9	31
Orumiyeh .....	78	42	100	2678.7	31
Esfahan .....	59	24	65	2972	30
Ahvaz .....	63	27	2	2746.6	30
Ilam.....	54	27	33	2855.8	25
Bojnurd .....	80	40	82	2635.1	35
Bandar Abbas .....	82	47	0	2864.4	30
Bushehr .....	80	55	0	2933.5	30
Birjand .....	54	22	68	3116.7	19
Tabriz .....	71	36	91	2617.3	26
Tehran .....	56	28	36	2847	23
Khorramabad .....	65	29	41	2762.7	26
Rasht .....	97	64	15	1736.8	18
Zahedan .....	50	19	45	2966.6	41
Zanjan .....	75	37	107	2681.2	23
Sari .....	92	70	14	1858.1	30
Semnan .....	54	30	37	2831.9	26
Sanandaj .....	70	29	91	2744	25
Shahr-e-Kord .....	68	30	113	2933.6	23
Shiraz .....	60	24	37	3147.1	29
Qazvin .....	73	32	78	2776.1	34
Qom .....	59	27	42	2625.8	31
Karaj.....	69	32	59	2819.4	25
Kerman .....	51	19	77	2978.6	35
Kermanshah .....	66	29	80	2730.4	31
Gorgan .....	85	53	12	1917.4	31
Mashhad .....	74	36	76	2758.3	22
Hamedan .....	76	35	111	2673.2	22
Yasuj.....	65	25	59	3131.9	30
Yazd .....	46	20	39	2920	33

Source: I. R. I. Meteorological Organization.

**1.7. METEOROLOGICAL DATA OF CAPITALS OF OSTANS, THE YEAR 1393**

Capital of Ostan	Air temperature (°c)					Annual precipitation (mm)
	Average Max.	Average Min.	Mean	Lowest min.	Highest max.	
Arak .....	22.4	8.6	15.2	-8.8	40.4	263.4
Ardebil .....	16.6	4.9	10.2	-18.8	38.2	279.1
Orumiyeh .....	19.6	5.6	12.5	-10.2	39	346.6
Esfahan .....	24.8	10.5	17.9	-6.6	41	95.5
Ahvaz .....	34.1	19.9	26.7	4	50.6	136.8
Ilam .....	24.4	10.6	17.2	-7.8	41.6	382.8
Bojnurd .....	20.8	7.7	13.9	-8	40.4	249.7
Bandar Abbas .....	32.4	22	27.2	6.2	47.2	190.4
Bushehr .....	30.5	22.5	26.2	7.3	42.8	98.8
Birjand .....	25.2	8.7	17	-9.7	41.1	110.8
Tabriz .....	20.2	8.6	14	-9.6	39.8	299.7
Tehran .....	23.7	14	18.9	-3.4	41.6	133.5
Khorramabad .....	25.9	9.2	17.6	-5.2	43.4	370.3
Rasht .....	21.4	13.4	16.8	-1.4	37.5	1318.4
Zahedan .....	27.5	11.4	19.7	-6.9	42.7	68.2
Zanjan .....	20.7	6.3	13	-9.5	39.5	298.8
Sari .....	23.3	14	18	-0.6	38.2	640.5
Semnan .....	24.9	13.7	19.2	-3.6	43	110
Sanandaj .....	24	7	15.1	-8.2	42	265.1
Shahr-e-Kord .....	21.3	2.3	12	-13.2	37	297.4
Shiraz .....	26.8	10.2	19	-4.4	41.8	224.8
Qazvin .....	23.2	8.2	13.1	-7.8	42.5	221.1
Qom .....	27.4	11.3	15.2	-4.6	46.6	73.8
Karaj .....	22.7	10.1	19.3	-5.9	41.4	191.4
Kerman .....	25.9	7.6	16.4	-9.5	40.8	123.4
Kermanshah .....	24.4	7.7	17.2	-7.7	42.2	223.7
Gorgan .....	24.5	12.6	16.2	-4	41	364.1
Mashhad .....	22.7	10.1	17.8	-4.9	41.6	286.7
Hamedan .....	23.1	4.9	16	-12.8	39.1	171.7
Yasuj .....	23.5	7.5	15	-6.2	39	623.9
Yazd .....	27.8	14.5	21.2	-1.5	43.9	42.6

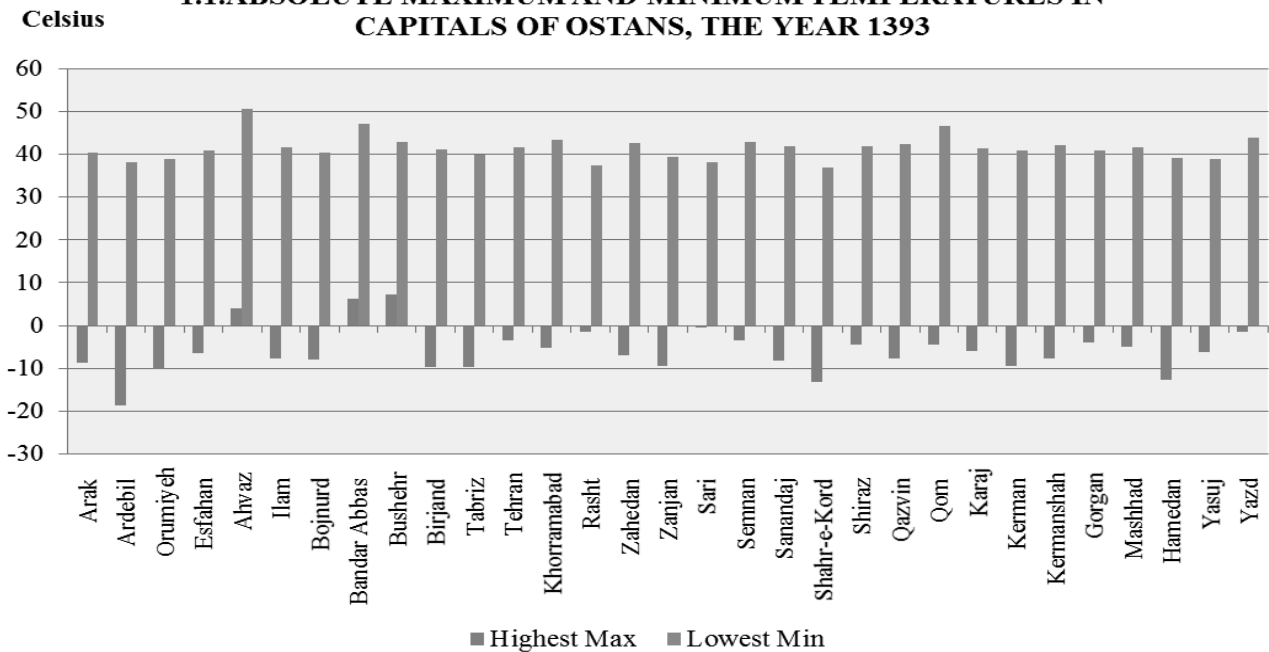


**1.7. METEOROLOGICAL DATA OF CAPITALS OF OSTANS, THE YEAR 1393 (continued)**

Capital of Ostan	Max. daily precipitation (mm)	Mean of relative humidity (%)		Number of frosty days	Number of dusty days	Bright sunshine (hours)	Max. wind speed (mps)
		Max.	Min.				
Arak .....	32.8	61	25	77	71	2942.5	60
Ardebil .....	55.1	87	49	103	25	2522.1	37
Orumiyeh.....	41.7	78	37	116	11	3035.2	40
Esfahan .....	11.4	52	29	62	28	3426.9	30
Ahvaz.....	21.4	63	25	0	67	3220.9	35
Ilam.....	31.8	57	25	32	52	3080.3	25
Bojnurd .....	26.9	79	36	87	10	2886.4	45
Bandar Abbas .....	99	81	46	0	117	3166.4	30
Bushehr .....	39.5	79	52	0	46	3208.6	30
Birjand .....	19.7	45	15	79	72	3493.9	26
Tabriz.....	46.4	69	35	90	15	2947.7	38
Tehran.....	16.6	49	21	8	15	2947.2	30
Khorramabad .....	44.5	65	23	47	39	3083.9	30
Rasht .....	89.2	96	64	3	1	1851.5	31
Zahedan .....	26.7	41	16	47	101	3345.2	41
Zanjan .....	29.2	73	35	100	3	2777.9	28
Sari.....	82.2	94	61	3	0	2106.2	25
Semnan .....	23.8	49	24	19	2	3124	26
Sanandaj.....	29.3	70	23	89	35	3135.2	70
Shahr-e-Kord .....	36	69	23	131	17	3207.7	25
Shiraz .....	37.8	60	18	46	40	3256.6	30
Qazvin.....	17.2	68	27	110	4	3065.1	31
Qom .....	35.2	76	28	78	79	2960.4	39
Karaj.....	9.7	55	22	56	28	3145.1	31
Kerman .....	15	65	27	41	24	3116.3	30
Kermanshah.....	30.7	47	15	88	37	3432	50
Gorgan .....	31.6	61	21	73	7	2941.4	31
Mashhad.....	54	91	50	25	12	2375	31
Hamedan.....	33	66	30	53	21	2894.1	23
Yasuj.....	65.4	65	20	78	23	3301	30
Yazd.....	8.6	39	15	10	42	3415.9	33

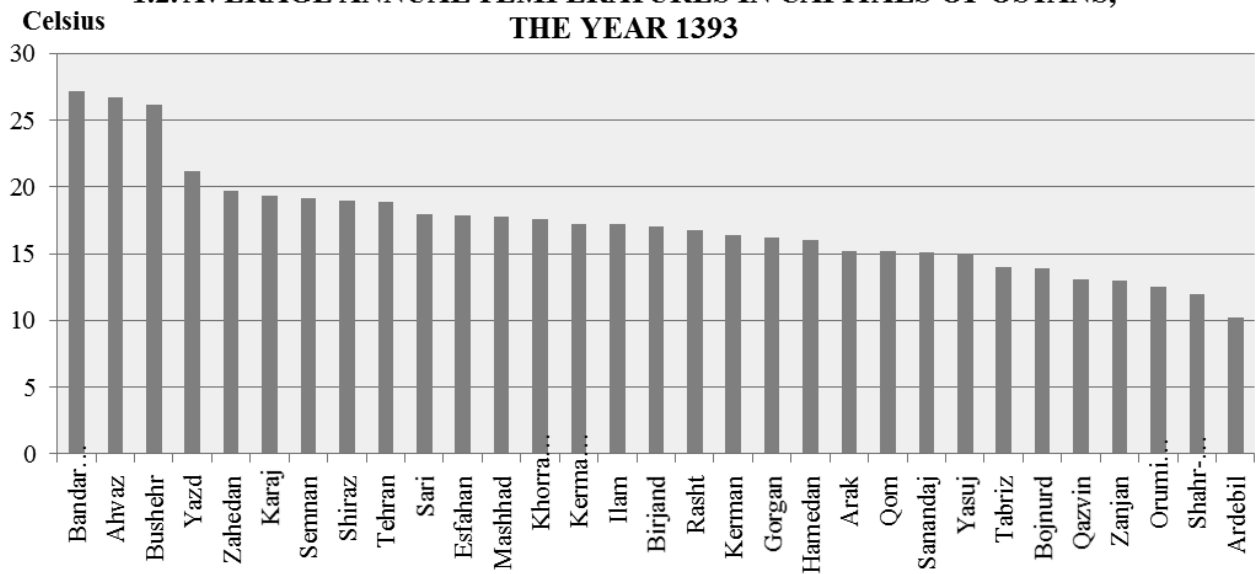
Source: I. R. I. Meteorological Organization.

**1.1. ABSOLUTE MAXIMUM AND MINIMUM TEMPERATURES IN CAPITALS OF OSTANS, THE YEAR 1393**



For data see Table 1.7.

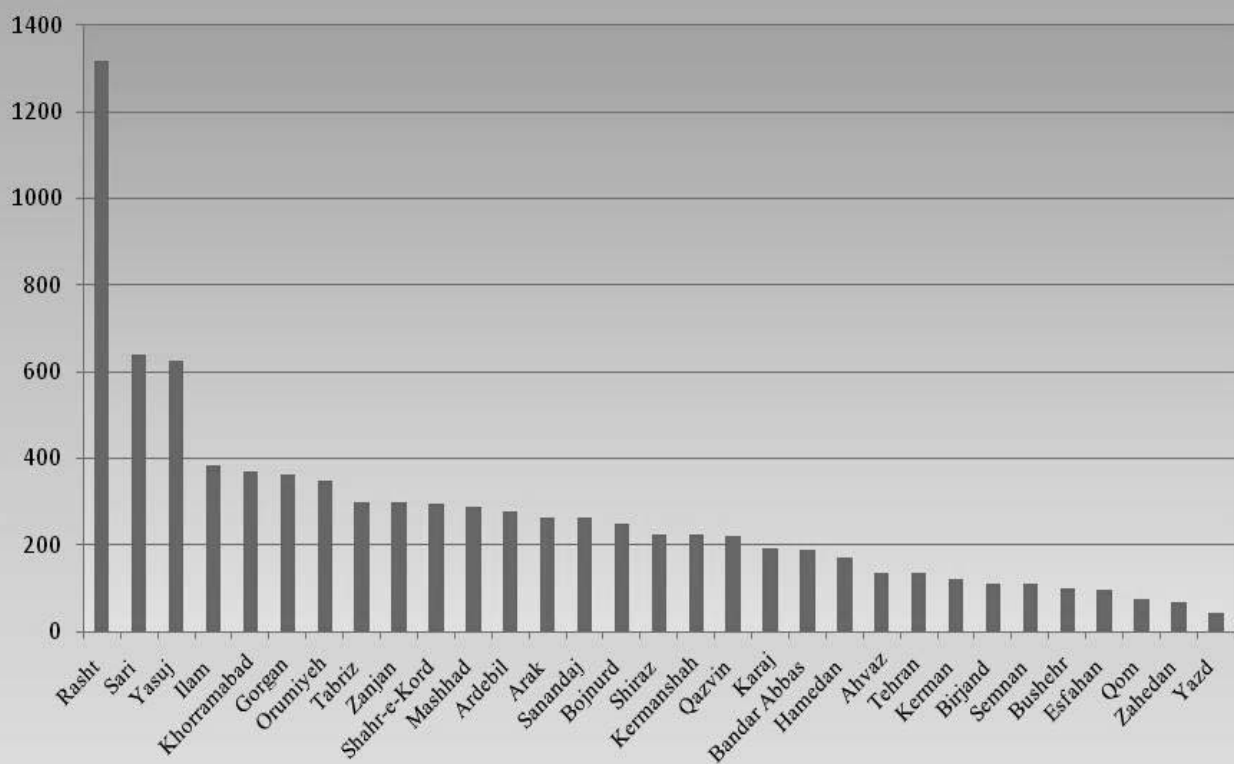
**1.2. AVERAGE ANNUAL TEMPERATURES IN CAPITALS OF OSTANS, THE YEAR 1393**



For data see Table 1.7.

1. 3. ANNUAL RAINFALL IN CAPITALS OF OSTANS, THE YEAR 1393

Millimetre



For data see Table 1.7.

**1.8. HIGHEST MAXIMUM TEMPRETURE, LOWEST MINIMUM TEMPRETURE AND AVERAGE MONTLY TEMPRETURE IN CAPITALS OF OSTANS, THE YEAR 1393 (°c)**

Capital of Ostan	Farvardin			Ordibehesht			Khordad		
	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp
Arak .....	26.2	-3.4	11.41	28.4	8.2	17.74	35.8	9.2	23.36
Ardebil .....	23.8	-14.4	7.06	27.4	2.2	15	38.2	6.2	17.62
Orumiyeh .....	24	-6	9.82	28.2	5.2	16.84	35	8.4	19.89
Esfahan .....	29.2	0.2	15.23	31.2	8.8	20.92	37.2	13.8	26.5
Ahvaz.....	41	8.6	23.71	42	19.4	31.72	48	21.8	36.2
Ilam.....	29	-1	13.04	31.2	8.6	19.9	41.6	11.4	25.15
Bojnurd.....	26	-5	10.01	30	7	18.39	36.6	8.6	22.99
Bandar Abbas .....	39.8	16	25.38	38.2	21.5	29.85	47.2	24.6	33.52
Bushehr.....	37.4	15	14.9	39	22.3	21.11	41.9	25.9	26.5
Birjand .....	29.3	-3.1	10.44	34.3	8.3	18.2	39	12.5	22.35
Tabriz .....	23.4	-6	15.23	29.6	7.4	23.15	36.6	11	27.47
Tehran.....	26.4	-2.6	13.25	31.8	12.4	19.71	38.2	13.6	25.91
Khorramabad .....	29.8	-1.4	11.94	33.6	5.8	19.85	40.6	9.6	24.13
Rasht .....	30.5	-0.2	18.04	32.5	11.6	24	33	15.6	28.96
Zahedan .....	32.8	0.7	8.91	35.4	11.2	15.58	42	14.8	20.01
Zanjan .....	23.2	-8	13.67	28.9	3.6	21.12	34.2	6.2	25.06
Sari .....	31	1.6	15.77	34	13	24.11	34	16	28.3
Semnan .....	29	0.8	11.42	34.2	12	17.85	39	16.2	23.09
Sanandaj .....	27.4	-5	9.14	32.4	3	14.03	38.5	7.2	19.83
Shahr-e-Kord .....	24.5	-6.4	16.33	27.2	-0.7	21.76	33	1.6	27.85
Shiraz .....	29.8	1.6	23.41	32.4	8.8	28.78	38.4	13	31.82
Qazvin .....	25.3	-6.1	9.55	27.7	2.9	15.62	35.1	4.2	20.69
Qom .....	26	-5.2	11.75	31.7	5.4	19.29	38.4	8.5	23.7
Karaj.....	30.9	-0.4	16.52	35.7	10.9	23.99	41.9	13.4	29.03
Kerman .....	26.4	-4.7	13.07	31.3	6.6	20.83	38	10.1	24.67
Kermanshah.....	29	-0.8	14.89	32.4	7.2	20.65	38.8	12.4	26.67
Gorgan .....	27.5	-4.8	12.04	31.2	5.2	18.47	39.5	7.5	24.07
Mashhad .....	33	0.2	13.23	38.2	10.8	21.13	41	15.6	25.92
Hamedan .....	27.6	-3.4	11.95	32.9	10.4	21.73	39.6	12.1	25.55
Yasuj .....	26	1	11.76	29	6	17.29	35.4	8.6	23.01
Yazd .....	33.5	3.1	18.58	35.4	13.4	24.98	40.9	19.7	30.81

**1.8. HIGHEST MAXIMUM TEMPRETURE, LOWEST MINIMUM TEMPRETURE AND AVERAGE MONTLY TEMPRETURE IN CAPITALS OF OSTANS, THE YEAR 1393**  
(continued)

(°c)

Capital of Ostan	Tir			Mordad			Shahrivar		
	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp
Arak .....	39.2	16.8	29.14	40.4	17.6	28.66	37.8	12.6	24.65
Ardebil .....	30.6	9.6	18.82	35.6	6.6	20.23	32.8	7	18.13
Orumiyeh .....	39	11.8	24.67	37	10.6	24.92	35.4	5.8	22.02
Esfahan .....	40	19.6	30.82	41	18.4	30.51	35.8	14.2	26.52
Ahvaz.....	50.6	26.4	38.22	48.6	26.2	38.22	47.8	20.8	35.55
Ilam .....	41.4	16.6	29.15	41.4	17.4	29.54	39	13	26.58
Bojnurd .....	40.4	12.6	26.37	40.2	12.2	26.41	34.8	11	23.48
Bandar Abbas .....	43.2	26.2	34.07	40.5	28.5	33.65	45	26.9	32.8
Bushehr.....	42.8	26.6	27.94	40.2	28.1	27.84	40.8	26.2	24.49
Birjand .....	41.1	11.7	26.85	40.9	10.4	27.83	36.3	8.7	25.47
Tabriz .....	39.8	15.4	32.51	38.8	15.4	32	36.6	10	29.04
Tehran.....	40.4	19.4	30.71	41.6	20	30.7	36	14	26.75
Khorramabad .....	43.4	14.8	26.26	43.4	15.2	27.25	40.8	10.8	25.51
Rasht .....	34.4	19.8	30.06	36.2	19.8	29.35	37.5	18.6	25.73
Zahedan .....	41.2	14.6	24.95	42.7	13.8	25.74	36.8	11	22.87
Zanjan .....	39	12	27.14	39.5	10.7	28.66	36.4	7.5	27.51
Sari .....	35	20.4	33.18	38.2	21.6	33.02	38	19.2	29.64
Semnan .....	43	21.4	28.46	43	21	28.5	38	20.4	24.43
Sanandaj .....	42	12.2	24.43	41.2	13	23.82	39	7.8	19.36
Shahr-e-Kord .....	35.8	8.6	30.99	37	9	30.89	32.2	4	26.91
Shiraz .....	39.8	16	33.54	41.8	16.4	33.79	36.6	14	33.21
Qazvin .....	38	11.7	26.49	39.1	12.6	26.26	34.7	7.1	22.57
Qom .....	40.8	15.6	28.17	42.5	14.5	27.92	37.2	12.4	25.09
Karaj.....	45	20.8	34.38	46.6	18.5	32.89	40.8	14.1	28.54
Kerman .....	39.2	15.5	28.92	41.4	14.8	28.77	35.8	13.4	26.28
Kermanshah.....	39.4	10.3	28.08	40.8	12.6	28.45	36.6	7.8	24.09
Gorgan .....	42.1	13.2	29.32	42.2	15.2	29.54	40	10.5	25.85
Mashhad .....	38	20.8	28.05	40.8	20.2	28.47	39.6	17.6	27.85
Hamedan .....	41.6	16.9	29.19	41.6	15.9	27.98	36	11.9	24.99
Yasuj .....	38	14.4	26.42	39	14.4	26.27	35	11	22.69
Yazd .....	43.4	23	34.09	43.9	20.9	33.76	39.4	18.4	29.44

**1.8.HIGHEST MAXIMUM TEMPRETURE, LOWEST MINIMUM TEMPRETURE AND  
AVERAGE MONTLY TEMPRETURE IN CAPITALS OF OSTANS, THE YEAR 1393  
(continued)**

(°C)

Capital of Ostan	Mehr			Aban			Azar		
	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp
Arak .....	31.4	4.8	17.64	22.2	-3.2	7.47	15.8	-4.2	4.92
Ardebil .....	30	-0.8	11.46	19.6	-12.4	4.96	14.6	-4.8	2.95
Orumiyeh .....	29.6	-1	13.92	18.4	-5.4	6.02	11.8	-4.4	3.19
Esfahan .....	33.6	7	21.3	26.2	-2.2	10.4	19.4	-2.2	6.89
Ahvaz.....	41.8	14.8	29.65	34.4	8	20.68	27.8	7.4	16.08
Ilam .....	31.6	4	19.6	24.8	-1.4	11.34	20	-0.2	8.53
Bojnurd .....	34.2	1	15.79	24	-3	6.73	18.2	-6.2	3.24
Bandar Abbas .....	39.4	22.3	30.49	36.3	10	24.57	30.7	8.3	20.73
Bushehr.....	38.1	21	20.82	32.8	15	10.07	27.6	11.3	6.54
Birjand .....	35.8	2.9	14.99	27.1	-5.4	7.4	22.4	-9.7	3.75
Tabriz .....	28.6	2.2	21.08	18.8	-2.8	11.44	10.6	-2.2	7.97
Tehran.....	33.2	9	20.08	24.6	2.4	10.95	15.6	1.8	7.9
Khorramabad .....	34.6	6	18.26	25	-1.2	12.2	18.8	-1.4	9.42
Rasht .....	35.4	11	23.19	25.8	2	13.48	16.6	2.6	9
Zahedan .....	37.4	4.2	14.8	29.6	-2.4	6.89	23.4	-5.6	3.73
Zanjan .....	30	4.6	20.33	22	-5	13.68	16.7	-3.5	9.84
Sari .....	36.6	10.4	21.64	30	4.4	11.62	20	0.8	7.65
Semnan .....	34.6	10	17.42	24.5	0.6	8.47	18	-1.2	5.57
Sanandaj .....	31.8	4.2	14.8	24	-3.4	5.97	16.2	-3.2	1.37
Shahr-e-Kord .....	29.4	0	22.16	24.4	-6.6	12.71	16.3	-12.4	8.69
Shiraz .....	34	8	30.33	28.6	-1	23.74	21.6	-2.2	19.29
Qazvin .....	29.3	1.2	15.12	21.8	-7.1	5.82	14.4	-6.5	3.3
Qom .....	33	5.2	16.71	24.4	-3.5	8.38	15.7	-3.4	4.82
Karaj.....	37	6.5	21.37	28.4	-1.6	10.96	19.3	-3	7.84
Kerman .....	32.3	5.4	17.86	23.1	-1	9.45	14.2	-2.2	6.01
Kermanshah.....	35	3.6	20.79	28.6	-6.2	10.44	23.6	-7.2	7.02
Gorgan .....	32.6	3.2	18.8	23.6	-2.4	9.81	17.9	-2.7	7.07
Mashhad .....	37.4	8.4	19.75	31.6	1.2	13.35	20.4	-2.2	8.94
Hamedan .....	35	3.2	17.93	25.8	-0.9	8.16	20	-4.9	4.77
Yasuj .....	32	6	17.77	24	-2.6	9.14	18.2	-3.6	5.87
Yazd .....	36.7	9.9	24.3	30.8	1.5	13.63	24.3	0.5	9.69

**1.8. HIGHEST MAXIMUM TEMPERATURE, LOWEST MINIMUM TEMPERATURE AND AVERAGE MONTHLY TEMPERATURE IN CAPITALS OF OSTANS, THE YEAR 1393**  
(continued)

(°C)

Capital of Ostan	Dey			Bahman			Esfand		
	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp	Highest max. Temp	Lowest min. Temp	Mean Temp
Arak .....	15	-8.8	2.75	18.4	-7	6.92	19.6	-6.6	5.71
Ardebil .....	13.2	-13.6	2.2	16.4	-8.8	3.08	18.4	-18.8	-0.06
Orumiyeh .....	12	-10.2	-0.18	15	-7.2	2.38	16.6	-7.8	4.63
Esfahan .....	19	-5	5.99	20.8	-6.6	9.41	21.6	-3	8.73
Ahvaz.....	24.6	4	13.66	26.6	5.4	17.16	30.4	5.8	18.28
Ilam .....	17	-7.8	4.73	19.7	-1.7	8.64	21.4	-6	8.93
Bojnurd .....	17	-6.4	2.82	18.6	-8	4.43	19.8	-5.6	4.2
Bandar Abbas .....	28.5	7	18.94	31	6.2	20.35	31.1	8.3	20.45
Bushehr.....	28.4	9.6	6.24	28.4	9.3	8.52	29.6	7.3	7.3
Birjand .....	20.2	-8.4	0.72	25	-6.7	3.2	22.8	-4.8	4.88
Tabriz .....	12	-9.6	7.08	14.4	-6.2	8.96	17.4	-5.8	8.72
Tehran.....	16.4	-1.5	5.34	16.6	0.2	8.81	19.4	-3.4	9.4
Khorramabad .....	16.8	-4.8	9.06	20.2	-5.2	8.76	21.6	-1.8	7.97
Rasht .....	26.5	-1.4	9.98	26.5	2	12.51	16.6	1	10.57
Zahedan .....	25	-6.9	2.2	28.2	-3.8	4.53	26.8	-2.6	4.21
Zanjan .....	14.6	-9.2	9.13	16.6	-8.5	9.33	19	-9.5	8.9
Sari .....	22.4	-0.2	5.88	22.8	-0.6	8.51	19.6	0.6	8.88
Semnan .....	15.6	-3.6	2.34	18.4	-2	5.55	21.4	-2.8	6.24
Sanandaj .....	15.2	-8.2	1.51	18.1	-7.6	4.99	20.6	-7.5	3.23
Shahr-e-Kord .....	15.9	-13.2	7.7	19	-12.6	10.13	17.2	-10.8	10.48
Shiraz .....	21	-4.4	17.1	23.2	-3.6	19.42	22.6	-4	19.38
Qazvin .....	13.8	-11.8	0.79	18.2	-8.9	4.87	18.3	-12.8	4.25
Qom .....	15.4	-7.8	3.44	17.4	-5.8	5.7	19.4	-6.8	5.34
Karaj.....	19.3	-4.6	6.13	19.8	-4.5	8.42	24.1	-2.6	10.03
Kerman .....	15.8	-4.7	5.29	18.2	-4.9	7.25	19.7	-5.9	6.44
Kermanshah.....	24.4	-9.5	6.72	23	-7.2	9.42	21.6	-6.5	7.39
Gorgan .....	15.5	-7.7	3.53	18.7	-7	7.36	21.2	-5.8	7.48
Mashhad .....	24.8	-2.8	7.78	22.6	-4	8.22	21.6	-3.6	8.54
Hamedan .....	22	-2.3	5.7	21.9	-3.6	6.56	21	-2.6	5.5
Yasuj .....	19.5	-5.6	4.97	19	-6.2	7.29	19.5	-5.2	6.34
Yazd .....	23	-1.5	8.75	26.5	-1.2	13.49	23.8	-1.2	11.16

Source: I. R. I. Meteorological Organization.

**1.9. TOTAL PRECIPITATION IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1393 (mm)**

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	83.9	11.8	9.9	1	0	0
Ardebil .....	9	33.5	25.8	8.4	0.4	0.6
Orumiyeh .....	54.9	29.4	24.4	0	0.3	0.1
Esfahan .....	34.5	8	3.6	0	3	0
Ahvaz .....	31.9	0.1	0.2	0	0	0
Ilam .....	31.5	17	0.3	0	18.4	0
Bojnurd .....	32.1	41.6	12.3	4	1.2	0.4
Bandar Abbas .....	65.2	0	0	0	0	0
Bushehr.....	4.3	0.2	0.1	0	0.2	0.1
Birjand .....	13	24.7	0.2	0	0	0
Tabriz .....	20.4	51.5	12.3	18.8	1	0
Tehran.....	13.7	7.5	11.1	2	0	0
Khorramabad.....	86.5	22.3	2	0	0	0
Rasht .....	62.7	9.8	10.8	12.2	5	45.9
Zahedan .....	8.2	2.3	0	0	0	0
Zanjan .....	36.6	40.4	22.5	21	0.1	0
Sari .....	81.5	1	66.2	16.7	2	10.2
Semnan .....	15.3	3.6	19.5	1	0	0
Sanandaj .....	13.9	14.7	7.8	0	2	0
Shahr-e-Kord .....	41.2	14.9	0.2	0	0	0
Shiraz .....	36.1	0.9	0.2	2	0	0
Qazvin .....	34.4	7.3	2.5	4	0	0
Qom .....	8.1	4.5	6	0.2	0	0.8
Karaj.....	40.8	28.6	17.1	9	0	0
Kerman .....	44	0.2	0	0	0	0
Kermanshah.....	30.5	12.1	7.5	0	0	0
Gorgan.....	66.3	4.1	79	5.8	17	2.4
Mashhad .....	68.2	19.8	21.8	0	0	0
Hamedan .....	30.1	20.3	9.2	0.3	0.2	0
Yasuj .....	160.8	6.9	0.8	8.7	4	0
Yazd .....	3.9	3	0	0	0	0



**1.9.TOTAL PRECIPITATION IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1393**  
**(continued)**
**(mm)**

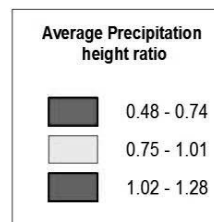
Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	45.4	24.1	18.1	4.5	19.1	45.6
Ardebil .....	97.5	20.7	19.5	2.5	27.7	33.5
Orumiyeh .....	149.9	9.7	31.1	1.1	13.1	32.6
Esfahan .....	0	13	15.3	0.6	6.9	10.6
Ahvaz .....	8.6	11.4	38.6	6	9.2	30.8
Ilam .....	50.9	83.4	43.2	35.9	24.4	77.8
Bojnurd .....	17.2	42.9	20.2	11	23.6	43.2
Bandar Abbas .....	1	0	0.2	0.8	7	116.2
Bushehr.....	0	40.4	33.7	0.4	3.1	16.3
Birjand .....	1	4	0.9	15.6	7.1	44.3
Tabriz .....	85.1	6.1	53.6	5.9	36.7	8.3
Tehran.....	10.2	9.1	26.7	5	20.4	27.8
Khorramabad.....	70.9	31.2	62.2	8.2	32.5	54.5
Rasht .....	339.2	190.7	213.6	138.6	134	155.9
Zahedan .....	0	0.3	0	13.7	0.7	43
Zanjan .....	43.5	19.5	36.1	3.4	43.8	31.9
Sari .....	140.7	50.9	71.2	29.8	50.7	119.6
Semnan .....	7	6.1	15.3	1.6	11	29.6
Sanandaj .....	68.2	43.5	55	6.7	29.6	23.7
Shahr-e-Kord .....	14	68.7	58	4.8	75.2	20.4
Shiraz .....	0.1	26.8	50.8	13.4	43.2	51.3
Qazvin .....	42.9	26.5	48.3	5.7	13.1	36.4
Qom .....	7.8	12	10.6	4.5	7	12.3
Karaj.....	5	21.5	26.1	7.6	16.9	18.8
Kerman .....	0	0.8	7.9	19.4	9.4	41.7
Kermanshah.....	58.9	34.7	43.7	12.3	5.4	18.6
Gorgan.....	32.8	23.6	33.6	13.9	26.2	59.4
Mashhad .....	16.3	29.4	17.5	28.6	33	52.1
Hamedan .....	31.4	9.1	29.5	8.3	12.9	20.4
Yasuj .....	21.5	83.6	139.6	31.7	68.5	97.8
Yazd .....	0	4.7	10.4	4.8	4	11.8

Source: I. R. I. Meteorological Organization.

**1.4. AVERAGE PRECIPITATION HEIGHT RATIO IN OSTANS IN THE YEAR 1393 TO LONG\_TERM AVERAGE**



For Data See Tabel 1.13



**1.10. TOTAL MONTHLY HOURS OF BRIGHT SUNSHINE IN CAPITALS OF OSTANS,  
THE YEAR 1393 (hour)**

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	241.2	271.9	340.3	364.7	359.9	323.5
Ardebil .....	249.9	286.1	351.2	382.2	371.3	341.2
Orumiyeh .....	206.1	251.9	283.5	284.7	335.8	274.4
Esfahan .....	274.7	287.2	318.2	312.8	366.4	343.6
Ahvaz .....	290.8	279.3	344.1	355.9	361.1	350.4
Ilam .....	243.1	289.4	309	354.7	363.1	344.1
Bojnurd .....	250.2	281.1	313.5	333.5	313.1	312.2
Bandar Abbas .....	253.2	265.8	305.4	289.9	344.2	327.8
Bushehr.....	278.4	260.3	326.2	328.5	341.5	335.1
Birjand .....	215.9	263.1	325.9	375.6	367.9	329.1
Tabriz .....	199.8	275.6	321.5	398	381.4	345.1
Tehran.....	287.7	293.7	354.8	394.7	378.7	355.7
Khorramabad.....	265.2	300.8	334.2	360.8	360.3	333.3
Rasht .....	220.3	266.9	315.3	305.1	352.1	322.1
Zahedan .....	266.9	274.3	293.7	313.4	349.1	366
Zanjan .....	260.8	276.4	309.5	348.1	334.4	338.3
Sari .....	279.7	275.5	234.1	338.9	331.4	330.4
Semnan .....	246.3	269.9	292.2	316.4	348.4	323.1
Sanandaj .....	275.5	280.1	315.1	331.3	348.8	337.4
Shahr-e-Kord .....	261.9	278.7	340.2	353.5	350.3	326.6
Shiraz .....	254.1	300.9	320.1	367.5	365.6	350.3
Qazvin .....	237.1	260.2	295.8	331.8	326.8	332.3
Qom .....	261.7	288.3	361.2	349.9	341	332.8
Karaj.....	206.2	249.6	280.2	236.4	314.8	263.6
Kerman .....	164.1	216.9	245.7	241.5	301.5	196.6
Kermanshah.....	255.8	273	322.7	349.3	345.4	331.7
Gorgan.....	208.9	211.7	244.3	196.2	280.3	192.3
Mashhad .....	250.2	255.5	300.7	287.5	327.3	320.7
Hamedan .....	273	318.6	322.7	250.5	243	275.4
Yasuj .....	275.5	245.1	327.1	310.2	340.3	329.5
Yazd .....	270.9	296.8	351.1	342.1	364	345.1

**1.10. TOTAL MONTHLY HOURS OF BRIGHT SUNSHINE IN CAPITALS OF OSTANS,  
THE YEAR 1393 (continued) (hour)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	190.7	204.8	64.9	176.2	189.1	220.5
Ardebil .....	210.8	188.9	73.8	167.9	197	214.9
Orumiyeh .....	151.2	160.3	97.1	176.7	155.8	144.6
Esfahan .....	250.2	219.2	165.3	207.4	152.1	219.2
Ahvaz .....	291.2	257.3	208.7	237.4	213.2	237.5
Ilam .....	244.4	210.9	149.6	141.7	191.3	239
Bojnurd .....	287.8	263.2	221.3	215.4	196.2	221.1
Bandar Abbas .....	240.5	196.9	155.1	215	146.4	207
Bushehr.....	275.6	227.7	202.6	210.7	190	231.1
Birjand .....	234.9	174.8	141.5	179.7	130.9	147.1
Tabriz .....	273	191.1	116.6	165.9	122.7	139.4
Tehran.....	294.6	272.9	223.4	223.6	224.9	191.2
Khorramabad.....	265.5	237.7	186.9	206.1	144.2	225.9
Rasht .....	239	189.8	100.5	143.8	118.6	204.4
Zahedan .....	265.2	233.1	171.1	224.8	191	205.4
Zanjan .....	274	274.6	258.9	234.1	238.2	197.9
Sari .....	295.7	267	236.8	230.2	219	217.9
Semnan .....	240.7	205.1	140.9	213.2	161.9	202.3
Sanandaj .....	257	229.4	188.5	207.8	156.4	217.8
Shahr-e-Kord .....	251.5	212	142.4	185.9	203.1	232.1
Shiraz .....	304.2	269.7	243.8	235.5	217.5	202.8
Qazvin .....	232.5	215.6	137.7	178.8	185.4	207.4
Qom .....	292.1	251.1	216.9	221.8	173.6	210.6
Karaj.....	171.6	152.3	108.9	167.8	109.2	114.4
Kerman .....	92	96.7	51.9	107.9	45.3	91.4
Kermanshah.....	256.8	214.5	158.1	181.5	167.9	227.2
Gorgan.....	139.2	162.5	103.2	159	105.1	103.5
Mashhad .....	259.6	224.9	170.5	168.1	173.1	204.4
Hamedan .....	269.5	274.9	243.5	237.7	248.9	208.7
Yasuj .....	259.1	225.2	147.1	192.2	184	229.8
Yazd .....	295.5	270.9	220.5	234.7	200.3	224

Source: I. R. I. Meteorological Organization.

**1.11. MAXIMUM WIND SPEED IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1393****(mps)**

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	10	9	10	10	10	10
Ardebil .....	20	18	24	14	17	15
Orumiyeh .....	20	13	14	8	10	8
Esfahan .....	18	15	13	10	10	11
Ahvaz .....	10	8	11	10	10	9
Ilam .....	14	15	12	10	13	12
Bojnurd .....	18	9	14	11	13	12
Bandar Abbas .....	12	12	9	11	9	11
Bushehr.....	16	17	11	20	14	10
Birjand .....	19	38	15	20	15	18
Tabriz .....	15	15	30	10	10	10
Tehran.....	14	16	11	13	23	10
Khorramabad.....	13	6	8	6	6	6
Rasht .....	20	17	15	10	11	10
Zahedan .....	18	12	15	11	14	15
Zanjan .....	25	10	10	8	8	7
Sari .....	13	15	16	10	12	9
Semnan .....	14	12	12	11	12	9
Sanandaj .....	12	12	15	16	14	14
Shahr-e-Kord .....	14	13	12	9	11	9
Shiraz .....	12	16	13	12	13	14
Qazvin .....	18	31	15	29	14	10
Qom .....	11	14	15	31	13	11
Karaj.....	24	22	24	16	25	14
Kerman .....	13	17	19	12	10	11
Kermanshah.....	24	28	15	14	17	10
Gorgan.....	13	10	10	9	10	9
Mashhad .....	22	15	15	12	17	9
Hamedan .....	17	10	12	12	13	11
Yasuj .....	12	16	9	9	16	11
Yazd .....	23	21	28	16	14	13

**1.11. MAXIMUM WIND SPEED IN CAPITALS OF OSTANS BY MONTH, THE YEAR 1393****(continued)****(mps)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak.....	14	10	8	10	10	10
Ardebil .....	18	13	16	19	23	15
Orumiyeh .....	10	8	7	22	11	11
Esfahan.....	15	12	11	15	15	15
Ahvaz .....	11	13	8	8	12	9
Ilam .....	13	10	8	7	18	16
Bojnurd.....	11	9	12	13	15	11
Bandar Abbas .....	15	16	10	9	9	20
Bushehr .....	12	9	12	13	11	18
Birjand.....	12	10	10	15	15	15
Tabriz .....	15	13	12	11	14	15
Tehran .....	13	10	8	11	14	18
Khorramabad.....	10	9	7	15	7	12
Rasht .....	13	13	11	15	13	22
Zahedan.....	13	10	20	16	16	17
Zanjan .....	14	10	11	11	5	15
Sari .....	12	10	8	7	10	7
Semnan.....	14	10	9	12	11	12
Sanandaj.....	22	19	20	20	24	18
Shahr-e-Kord.....	12	13	8	12	14	12
Shiraz .....	14	21	16	14	18	20
Qazvin .....	13	12	9	10	14	11
Qom.....	13	9	12	11	14	13
Karaj.....	21	11	15	15	17	20
Kerman.....	14	10	10	11	11	13
Kermanshah .....	15	21	15	18	20	27
Gorgan.....	12	10	9	18	13	13
Mashhad.....	10	11	10	9	15	17
Hamedan .....	11	12	11	10	16	19
Yasuj .....	15	15	11	11	9	10
Yazd .....	16	19	11	20	16	19

Source: I. R. I. Meteorological Organization.

**1.12. TOTAL ANNUAL PRECIPITATION IN CAPITALS OF OSTANS (mm)**

Capital of Ostan	1375	1380	1385	1389	1390	1391	1392	1393
Arak .....	303	260	283	262	199	289	264	264
Ardebil .....	347	234	237	237	259	282	268	279
Orumiyeh .....	263	228	372	342	334	317	241	347
Esfahan .....	67	94	220	98	150	222	157	96
Ahvaz .....	152	235	184	173	89	210	238	137
Ilam .....	578	598	555	473	361	455	664	383
Bojnurd .....	172	176	241	232	209	205	116	250
Bandar Abbas .....	167	85	277	99	58	84	272	190
Bushehr .....	217	488	224	145	124	201	325	99
Birjand .....	102	145	135	83	95	162	114	111
Tabriz .....	259	210	129	180	272	245	226	300
Tehran .....	156	192	227	213	316	215	82	134
Khorramabad .....	428	440	510	415	286	382	434	370
Rasht .....	1015	1262	1476	1127	1637	1442	1325	1318
Zahedan .....	73	14	55	99	47	53	108	68
Zanjan .....	249	232	308	233	366	392	290	299
Sari .....	000	591	684	547	919	855	741	641
Semnan .....	128	73	177	105	176	133	80	110
Sanandaj .....	413	310	449	311	373	306	319	265
Shahr-e-Kord .....	258	334	413	274	240	386	324	297
Shiraz .....	202	317	305	239	274	305	381	225
Qazvin .....	265	232	325	353	424	315	250	221
Qom .....	78	125	111	87	123	150	82	74
Karaj .....	290	351	302	295	351	290	134	191
Kerman .....	123	119	134	119	108	119	169	123
Kermanshah .....	396	357	430	342	415	317	409	224
Gorgan .....	477	468	522	360	724	676	387	364
Mashhad .....	170	153	223	156	254	282	141	287
Hamedan .....	213	225	283	301	313	230	310	172
Yasuj .....	474	1126	777	769	661	826	648	624
Yazd .....	29	60	44	36	22	77	64	43

Source: I. R. I. Meteorological Organization.

**1.13. AVERAGE ANNUAL HEIGHT OF PRECIPITATION IN OSTANS****(mm)**

Ostan	1380	1385	1389	1390	1391	1392	1393	Long term
<b>Total country</b> .....	<b>195.98</b>	<b>147.68</b>	<b>201.69</b>	<b>205.92</b>	<b>226.3</b>	<b>219.6</b>	<b>220.2</b>	<b>240.2</b>
East Azarbayejan .....	206.66	204.8	253.36	295.6	308.6	245.8	337.7	278.4
West Azarbayejan.....	278.78	289.83	334.72	407.57	408.3	311.9	361.2	398
Ardebil .....	291.21	195.15	341.6	378.85	368.1	294.6	341	319.1
Esfahan .....	136.1	127.9	145.77	144.56	216.3	176.6	175.4	170.2
Alborz.....	<sup>(1)</sup> 000	<sup>(1)</sup> 000	<sup>(1)</sup> 000	<sup>(1)</sup> 000	332.6	191.9	202.2	295.6
Ilam.....	432.08	245.55	365.15	262.11	355.7	515.8	357.5	435.4
Bushehr.....	457.87	174.04	182.08	124.28	207.6	362.3	124.3	256.9
Tehran.....	<sup>(1)</sup> 235.47	<sup>(1)</sup> 185.01	<sup>(1)</sup> 283.77	<sup>(1)</sup> 380.99	324.3	177.1	230.7	321.5
Chaharmahal & Bakhtiari.....	670.53	432.25	540.78	488.99	687.9	548.8	448.8	533
South Khorasan.....	<sup>(2)</sup> 000	36.53	81.29	99.1	110.6	102.2	109.5	127.3
Khorasan-e-Razavi .....	<sup>(2)</sup> 114.95	86.85	163.17	198.34	217.6	117.7	236.1	216.6
North Khorasan .....	<sup>(2)</sup> 000	185.51	273	300.66	312.4	174.8	245.9	245.6
Khuzestan .....	360.7	195.36	261.39	179.27	326.7	319.3	187.1	274.3
Zanjan.....	237.74	211.37	323.32	383.55	370	287.3	252.7	312.9
Semnan .....	110.04	105.22	117.2	156.36	174.3	72.1	134	138.9
Sistan & Baluchestan.....	31.95	48.78	107.18	74.1	72	150.6	78.5	94.4
Fars .....	305.62	205.79	260.11	226.74	235.6	294.1	223.6	280.8
Qazvin.....	330.04	266.95	378.05	422.24	335.8	282.7	250.7	320.9
Qom .....	107.95	99.01	115.92	141.74	177	103.2	80.5	146.4
Kordestan.....	399.62	309.74	407.02	472.39	410.3	395.5	392.1	479.6
Kerman .....	93.08	58.79	112.63	79.3	103.4	172.4	145.2	129.7
Kermanshah.....	370.12	285.22	391.59	432.58	372.6	455.3	331.8	429.1
Kohgiluyeh & Boyerahmad.....	712.05	286.45	488.65	426.15	577.6	496.8	417.2	582.2
Golestan.....	382.98	302.73	379.66	567.95	652.2	345	408.5	522.4
Gilan .....	1057.41	897.2	916.54	1231.13	907.5	912.6	1104.1	1287
Lorestan .....	405.97	336.2	414.99	331.13	418.8	432.7	412.2	456.3
Mazandaran .....	774.84	570.26	585.17	909.19	749.4	604.8	700.4	863.4
Markazi.....	193.89	190.95	252.87	238.27	294.1	265.2	232.5	279.6
Hormozgan .....	105.33	93.91	121.08	73.51	98.6	199.7	87.8	149.7
Hamedan.....	271.51	248.53	356.54	350.89	270.2	284.5	272.4	336
Yazd.....	76.19	46.52	57.89	60.31	102	83.5	87.8	70.2

1. Statistics for Alborz are included with Tehran.

2. Statistics for South Khorasan and North Khorasan are included with Khorasan-e-Razavi.

Source: I.R. I. Meteorological Organization.



**1.14. AREA AND OVERLAND FLOW COEFFICIENT OF MAIN BASINS**

Main basin	Area (1000 km <sup>2</sup> )	Coefficient of overland flow, 45-year average (1347-1392) (%)
<b>Total country</b> .....	<b>1622.6</b>	<b>22.0</b>
Caspian Sea .....	174.6	22.8
Persian Gulf and Oman Sea .....	424.5	31.1
Lake Orumiyeh .....	51.8	29.9
Central Plateau .....	824.4	10.0
Eastern Border .....	103.2	14.0
Qareh Qum .....	44.2	31.0

Source: Ministry of Energy.

**1.15. VOLUME OF PRECIPITATION IN THE MAIN BASINS****(bln m<sup>3</sup>)**

Aquatic year	Total country	Caspian Sea	Persian Gulf & Oman Sea	Lake Orumiyeh	Central Plateau	Eastern Border	Qareh Qum
Average 45-year (from the years 1347-48 through 1391-92).....	401.391	73.866	154.809	17.636	134.620	10.790	9.669
1374-75 .....	511.800	68.410	212.650	16.000	189.200	19.490	6.040
1379-80 .....	229.550	60.756	110.450	12.031	105.931	3.923	6.459
1384-85 .....	351.635	66.164	147.105	17.102	109.583	4.731	6.950
1388-89 .....	390.763	78.210	151.606	20.055	121.485	10.370	9.036
1389-90 .....	328.184	66.913	120.200	15.405	110.723	8.331	6.613
1390-91 .....	337.197	90.121	95.865	15.393	116.623	8.226	10.969
1391-92 .....	393.276	70.789	148.588	17.105	136.064	11.580	9.150
<b>1392-93</b> .....	<b>357.175</b>	<b>63.969</b>	<b>141.775</b>	<b>14.635</b>	<b>118.303</b>	<b>10.484</b>	<b>8.009</b>

Source: Ministry of Energy.

**1.16. ESTIMATED VOLUME OF OVERLAND FLOWS OF THE MAIN BASINS (bln m3)**

Aquatic year	Total country	Caspian Sea	Persian Gulf & Oman Sea	Lake Orumiyeh	Central Plateau	Eastern Border	Qareh Qum
Average 45-year (from the years 1347-48 through 1391-92).....	88.218	16.876	48.085	5.280	13.466	1.513	2.999
1374-75.....	109.560	19.360	59.890	4.770	22.200	1.898	1.442
1379-80.....	37.640	6.540	23.560	1.270	4.520	0.462	1.284
1384-85.....	90.317	11.148	62.297	3.701	11.458	0.322	1.391
1388-89.....	52.070	10.410	27.520	3.140	9.290	0.478	1.229
1389-90.....	44.187	7.904	23.290	2.947	8.718	0.293	1.034
1390-91.....	50.891	14.188	20.040	4.184	10.731	0.333	1.416
1391-92.....	49.000	8.460	27.160	3.030	7.900	0.812	1.642
<b>1392-93.....</b>	<b>42.703</b>	<b>6.356</b>	<b>25.805</b>	<b>2.57</b>	<b>6.405</b>	<b>0.346</b>	<b>1.222</b>

Source: Ministry of Energy.

