

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 $25^{\circ} 04'$ and $39^{\circ} 46'$ north, and longitudes $44^{\circ} 02'$ and $63^{\circ} 19'$ 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, Qaflan Kuh mountains in Azarbayejan, Alborz 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 northwest and the southeast 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 most of the Iranian lakes is salty. The major internal lakes are: Orumiyeh, Namak, Hamoun Jazmourian, Hamoun-e-Saberi,

Bakhtegan, Toshak, Hamoun-e-Pouzak, Maherlu, 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 Zagros 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 100000Km². Tehran province with an area of about 14000Km² ranks 29th among the nations' 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 m³ out of which the share of each basin is as follows: the Caspian Sea :63.969 bln m³, the Persian Gulf and Oman Sea 141.775 bln m³, the Lake of Orumiyeh: 14.635 bln m³, Central Plateau:118.303 bln m³, Eastern Border:10.484 bln m³& Qareh Qum 8.009 bln m³.

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
Total	8640
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
Total country	2	44	19	63	4	25	46	39
East Azarbayjan	5	45	21	48	45	36	26	39
West Azarbayjan.....	2	44	24	47	58	35	46	39
Ardeabil	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, BAKHSHES, 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
1393	428	1058	1243	2589

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 ⁽¹⁾ (sq km)	Number of Shahrestans	Number of Bakhshes	Number of cities	Number of Dehestans
Total country	xx	1628792	428	1058	1243	2589
East Azarbayjan	Tabriz	45637	20	44	62	142
West Azarbayjan	Orumiye	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 & Bakhtiyari	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	Bandar Abbas	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 Bakshes	Number of cities	Number of Dehestans
Total country.....	1058	1243	2589
East Azarbayan.....	44	62	142
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
West Azarbayan.....	40	42	113
Orumiye	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
<i>Ardebil</i>	29	26	71
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
<i>Esfahan</i>	51	106	129
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
Dehghan	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
<i>Alborz</i>	13	17	29
Eshtehard	2	1	4
Savojbalagh	3	5	6
Taleghan	2	1	4
Fardis	2	2	4
Karaj	2	6	6
Nazarabad	2	2	5
<i>Ilam</i>	26	25	49

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

Ostan and Shahrestan	Number of Bakhses	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
Bushehr.....	25	37	48
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
Tehran.....	33	43	71
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
Robatkarim	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
Chaharmahal & Bakhtiyari.....	25	40	50
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
South Khorasan	25	28	61
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 Bakhses	Number of cities	Number of Dehestans
Birjand.....	1	1	6
Khosaf	2	2	5
Darmiyan.....	3	4	6
Zeerkoooh	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
<i>Khorasan-e-Razavi</i>	70	72	164
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 ⁽¹⁾	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
<i>North Khorasan</i>	19	22	45
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
<i>Khuzestan</i>	67	77	142
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
Hendijan	2	2	4
Hovayzeh	2	2	4
<i>Zanjan</i>	17	21	48
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
<i>Semnan</i>	15	20	31
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
<i>Sistan & Baluchestan</i>	48	37	112
Iranshahr	3	4	7
Chabahar	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 Bakshes	Number of cities	Number of Dehestans
Zahedan	3	2	6
Zahak	2	1	4
Saravan	3	5	8
Sarbaz	4	3	11
Sibsavaran.....	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
<i>Fars</i>	84	102	205
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
<i>Qazvin</i>	19	25	46
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 Bakhses	Number of cities	Number of Dehestans
Takestan	4	5	9
Qazvin	5	7	14
<i>Qom</i>	5	6	9
Qom	5	6	9
<i>Kordestan</i>	31	29	86
Baneh.....	4	4	8
Bijar	3	5	11
Dehgalan.....	2	2	5
Divandarreh	3	2	8
Sarvabad	2	2	8
Saqqez	4	2	11
Sanandaj	4	2	12
Qorveh	4	4	10
Kamyaran	2	2	7
Marivan	3	4	6
<i>Kerman</i>	58	71	151
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>	31	32	86
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 Bakshes	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
Kohgiluyeh & Boyerahmad	19	17	45
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
Golestan.....	27	29	60
Azadshahr	2	3	4
Aq Qala.....	2	2	5
Bandar Gaz	2	2	4
Torkaman.....	2	1	4
Ramyan.....	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
Gilan.....	43	53	109
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 Bakhses	Number of cities	Number of Dehestans
Fuman	2	4	6
Lahijan	2	2	7
Langrud	3	5	7
Masal	2	2	4
<i>Lorestān</i>	31	25	87
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
<i>Mazandaran</i>	56	58	131
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
<i>Markazi</i>	23	33	66
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
Komejan	2	2	4
Mahallat	1	2	2
Hormozgan	38	39	85
Abumusa	2	1	2
Bastak	3	3	7
Bashagerd	3	2	6
Bandar Abbas	4	5	11
Bandar Lengeh	4	5	8
parsiyān	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
Hamedan	25	28	73
Asadabad	2	2	6
Bahar	3	3	6
Tuyserkan	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
Yazd	21	21	45
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

I. 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		
Orumiyyeh	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 tempreture (°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

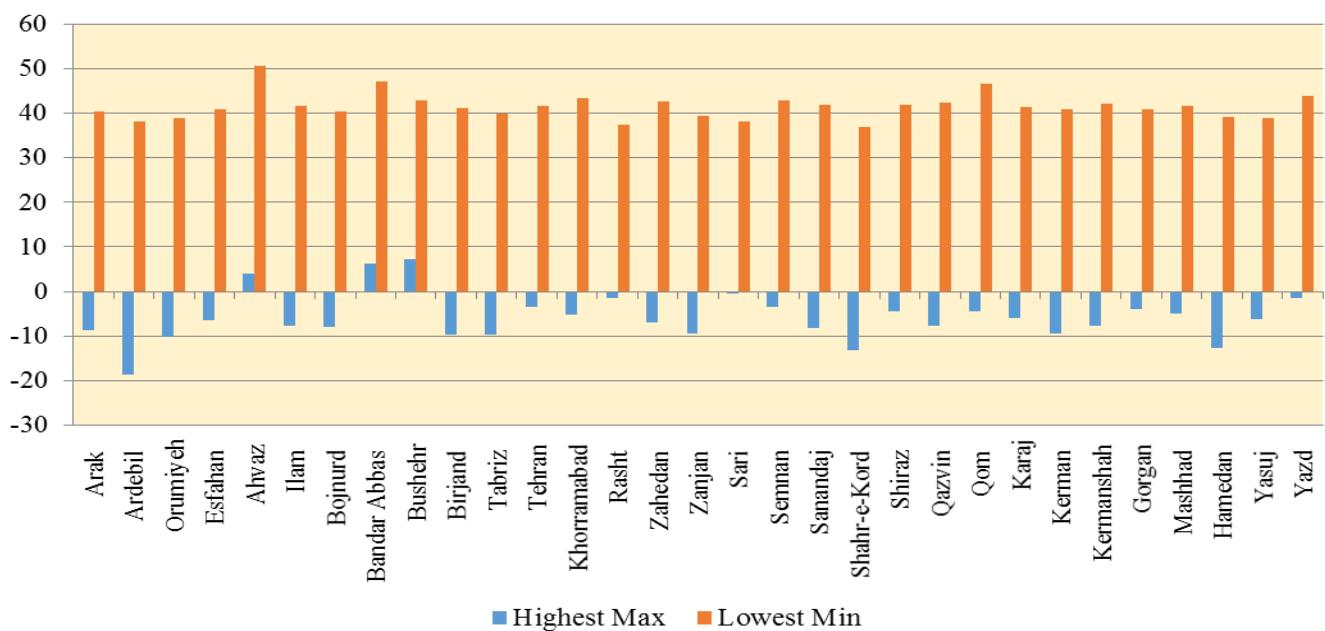
Capital of Ostan	Air temperature (°c)					Annual precipitation (mm)
	Average Max.	Average Min.	Mean	Lowest min.	Highest max.	
Arak	22.4	8.6	15.2	-8.8	40.4	263.4
Ardebil	16.6	4.9	10.2	-18.8	38.2	279.1
Orumiye	19.6	5.6	12.5	-10.2	39	346.6
Esfahan	24.8	10.5	17.9	-6.6	41	95.5
Ahvaz	34.1	19.9	26.7	4	50.6	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

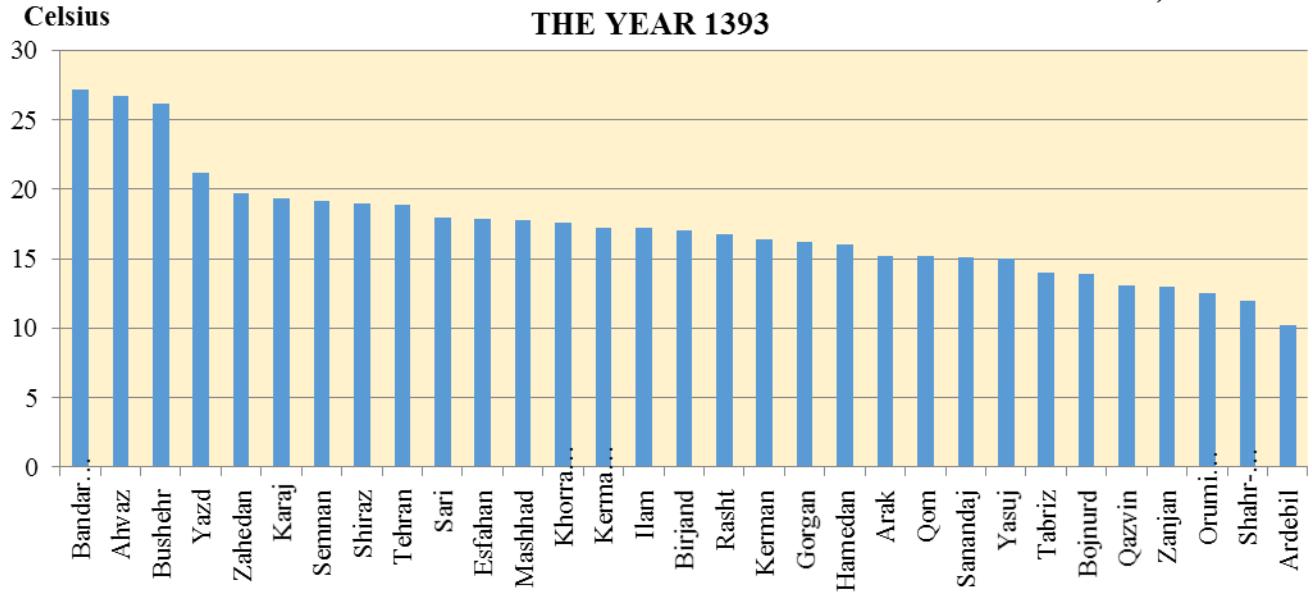
Source: I.R.I. Meteorological Organization.

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



For data see Table 1.7.

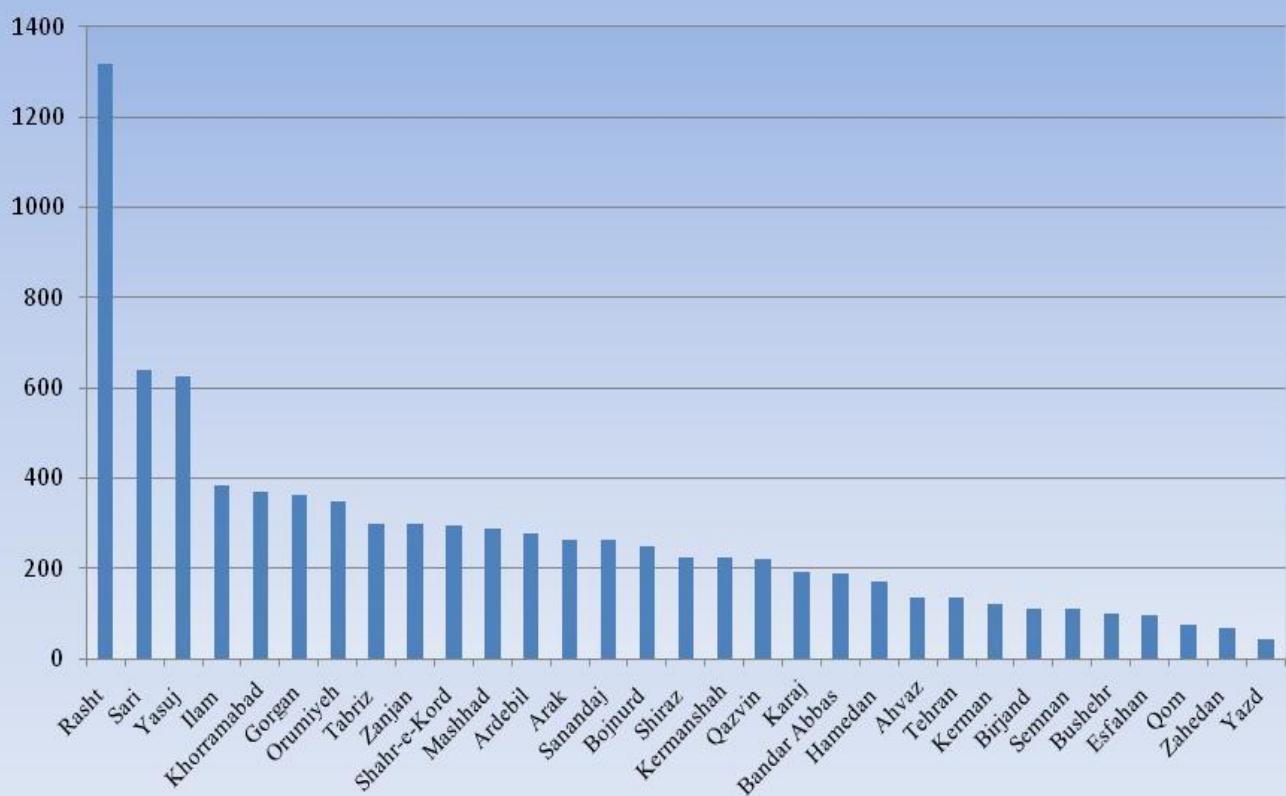
1.2. AVERAGE ANNUAL TEMPERATURES IN CAPITALS OF OSTANS, THE YEAR 1393



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 TEMPERATURE, LOWEST MINIMUM TEMPERATURE AND AVERAGE MONTHLY TEMPERATURE 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
Orumiye	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 TEMPRETURE, LOWEST MINIMUM TEMPRETURE AND AVERAGE MONTLY TEMPRETURE 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



Average Precipitation height ratio

■	0.48 - 0.74
■	0.75 - 1.01
■	1.02 - 1.28

For Data See Table 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
Orumiye	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
Orumiyyeh	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
Orumiye	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
Orumiye	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
Total country.....	195.98	147.68	201.69	205.92	226.3	219.6	220.2	240.2
East Azarbayjan	206.66	204.8	253.36	295.6	308.6	245.8	337.7	278.4
West Azarbayjan	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	(¹)000	(¹)000	(¹)000	(¹)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	(¹)235.47	(¹)185.01	(¹)283.77	(¹)380.99	324.3	177.1	230.7	321.5
Chaharmahal & Bakhtiyari	670.53	432.25	540.78	488.99	687.9	548.8	448.8	533
South Khorasan	(²)000	36.53	81.29	99.1	110.6	102.2	109.5	127.3
Khorasan-e-Razavi	(²)114.95	86.85	163.17	198.34	217.6	117.7	236.1	216.6
North Khorasan	(²)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 ²)	Coefficient of overland flow, 45-year average (1347-1392) (%)
Total country	1622.6	22.0
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 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).....	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
1392-93.....	357.175	63.969	141.775	14.635	118.303	10.484	8.009

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
1392-93.....	42.703	6.356	25.805	2.57	6.405	0.346	1.222

Source: Ministry of Energy.

