

# 1

# Land and Climate





## ***Introduction***

The statistical information appeared in this chapter is presented in three sections: Geographical characteristics and administrative divisions, Climate, and Environment.

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

Iran comprises a land area of over 1.6 million square kilometers. It lies down the northern temperate zone, between latitudes 25° 00' and 39° 47' north, and longitudes 44° 02' and 63° 20' east. The land's average height is over 1200 meters. 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, Azerbaijan, and Armenia to the north, Afghanistan and Pakistan to the east, Oman Sea and Persian Gulf to the south, and Iraq and Turkey to 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, Albourz mountain ranges at the north of Tehran and south of Mazandaran and Gilan Ostans, Ala Dagh, Binalud, Hezar Masjed

and Qarah Dagh in Khorasan Ostan on the 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 Jadi (new Hengam), Kabudan, Ashk (Orumiye Lake), Faroor Bozorg (Great Faroor), Hendurabi, Khark, Minou, Siri, Khan, Abu Mosa, Espir (Orumiye Lake), Tonb Bozorg (Great Tonb), Morghi, Kharku, Arezoo, (Orumiye Lake), Faroor Kuchak( Small Faroor) and Tunb Kuchak ( Small Tonb).

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

Bakhtegan, Toshak, Hamoun-e-Pouzak, Maharlou, Hamoune-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 variable climate. The effect of distance from the sea, namely closeness and remoteness from sea, can be easily perceived by comparing the large amount of rainfall and rich vegetation and highly populated areas around the Caspian Sea to 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 mountain 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 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) centers. 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 Qum respectively in 1383.

## 3. Environment

Statistics for types of natural resources, natural monuments protected by Iran Department of Environment have been reflected in the Iranian statistical yearbook since 1368.

### 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, 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):** the 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 by devices like SSB, telephone or telex communicated to meteorological centers across the globe 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:** the 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 of overland flow 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.

**National parks:** an area of the nation's natural resources such as jungles, pastures, natural coppices, woodlands, plains, water and mountainous regions

which presents distinguished samples of Iran's natural manifestations and is protected in order to provide sustainable preservation of its natural and variable conditions and create a suitable environment for reproduction and breeding of wildlife and growth of plants in a completely natural condition.

**Wildlife habitats:** an area of the nation's natural resources such as jungles, pastures, natural coppices, woodlands, plains, water and mountainous regions which has typical natural habitats and special ecological conditions for wildlife and is protected in order to preserve or rehabilitate these protected habitats.

**Nature reserves:** protected areas of the country's nature, including jungles, pastures, plains, or mountainous regions which are habitat for important or rare species of wildlife and/or plantation.

**National natural heritages:** specific and rare species of plants or animal and unique picturesque settings or views, specific natural forms of the earth as well as very old trees which are protected in an appropriate limit.

#### *Selected information*

The total length of the I.R. Iran's borderlines is 8865 kilometers out of which the longest borderline is for that of Iran-Iraq and the shortest one goes to Iran-Armenia which equals 1609 and 48 kilometers respectively.

In 1389, Sistan & Baluchestan, Kerman, Yazd, 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 100000 Km<sup>2</sup>. Tehran as the capital city of Iran with an area of 19000 Km<sup>2</sup> ranks as the nation's 24th largest province.

In 1389, I.R.Iran was divided into 31 Ostans (provinces), 397 Shahrestans (sub-provinces), 982 Bakhshes (counties), 1144 Shahrs (cities) and 2496 Dehestans (rural agglomerations).

Moreover, average maximum and minimum temperatures in Ostans' centers belong to Bandar Abbas, with 27.4° C and Ardebil with 10.8° C respectively. Furthermore, the absolute maximum belongs to Ahvaz with 50.8° C and the absolute minimum goes to Ardebil with -20.2° C. Also in the said year, the highest annual precipitation of the country belongs to Rasht and Sari which amounted to 1126.5 and 547.2 mm respectively and Yazd and Qum with 35.9 and 86.9 mm respectively had the lowest annual precipitation amongst all Ostans' centers. The maximum frosty days belong to Shahr-e-Kord with 146 days and Orumiyeh with 128 days. Bandar Abbas, Bushehr and Ahvaz have not experienced any frosty day.

The volume of precipitation in national main basins during the aquatic year of 1388-89 was approximately 390 bln m<sup>3</sup> out of which the share of each basin is as follows: the Caspian Sea 78.2bln m<sup>3</sup>, the Persian Gulf and Oman Sea 151.6bln m<sup>3</sup>, the Lake Orumiyeh 20.0 bln m<sup>3</sup>, Central Plateau 121.4 bln m<sup>3</sup>, Eastern Border 10.3 bln m<sup>3</sup> & Qareh Qum 9.0 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%, the Persian Gulf and Oman Sea 26%, Lake Orumiyeh 3%, Central Plateau 51%, Eastern Border 6 % & Qareh Qum 3%.

% & Qareh Qum 3%.

**1. 1. LENGTH OF IRANIAN BORDERLINES**

(km)

Total	Iran-Iraq borderline	Iran- Turkey borderline	Iran- Turkmenistan borderline	Iran- Azerbaijan borderline
8865.....	1609	511	1205	759
Iran- Armenia border	Northern coastline	Iran- Afghanistan borderline	Iran- Pakistan borderline	Southern coastline
48	765	945	978	2045

*Source: Armed Forces Geographical Organization***1. 2. LONGITUDE AND LATITUDE OF OSTANS, 1389**

Ostan	Longitude				Latitude			
	Lower limit		Upper limit		Lower limit		Upper limit	
	Degree	Minute	Degree	Minute	Degree	Minute	Degree	Minute
<b>Total country</b> .... .....	44	2	63	20	25	0	39	47
East Azarbayjan .....	45	5	48	21	36	45	39	25
West Azarbayjan .....	44	2	47	23	35	58	39	47
Ardebil .....	47	17	48	55	37	6	39	42
Esfahan .....	49	40	55	30	30	42	34	30
Ilam .....	45	40	48	3	32	3	34	2
Bushehr .....	50	6	52	56	27	16	30	18
Tehran .....	50	10	53	10	34	52	36	21
Chaharmahal & Bakhtiyari	49	30	51	26	31	9	32	49
South Khorasan .....	57	1	60	56	30	32	34	37
Khorasan-e-Razavi .....	56	45	67	17	34	51	37	45
North Khorasan .....	55	53	58	20	36	37	38	17
Khuzestan .....	47	40	50	33	29	57	33	0
Zanjan .....	47	10	49	26	35	33	37	15
Semnan .....	51	50	57	3	34	15	37	20
Sistan & Baluchestan .....	58	55	63	20	25	4	31	29
Fars .....	50	36	55	35	27	3	31	40
Qazvin .....	48	44	50	51	35	24	36	49
Qom .....	50	6	51	58	34	9	35	11
Kordestan .....	45	33	48	15	34	44	36	28
Kerman .....	54	21	59	34	26	29	31	58
Kermanshah .....	45	24	48	6	33	41	35	17
Kohgiluyeh & Boyerahmad	49	53	51	53	29	56	31	29
Golestan .....	53	51	56	19	36	30	38	8
Gilan .....	48	34	50	36	36	34	38	27
Lorestan .....	46	50	50	1	32	40	34	23
Mazandaran .....	50	21	54	8	35	46	36	58
Markazi .....	48	57	51	4	33	23	35	35
Hormozgan .....	52	44	59	14	25	24	28	53
Hamedan .....	47	48	49	28	34	0	35	44
Yazd .....	52	48	58	21	29	36	35	6

*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
1370 .....	229	617	520	2093
1375 .....	265	707	678	2227
1380 .....	299	794	889	2305
1385 .....	336	889	1015	2400
1386 .....	336	889	1016	2400
1387 .....	363	919	1061	2430
1388.....	380	945	1105	2459
<b>1389 .....</b>	<b>397</b>	<b>982</b>	<b>1144</b>	<b>2496</b>

Sources: Statistical Centre of Iran;  
- Ministry of the Interior.

**1. 4. GENERAL CHARACTERISTICS OF OSTANS ACCORDING TO THE ADMINISTRATIVE DIVISIONS AT THE END OF 1389**

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>1628750</b>	<b>397</b>	<b>982</b>	<b>1144</b>	<b>2496</b>
East Azarbeyejan .....	Tabriz	45650	20	44	58	142
West Azarbeyejan .....	Orumiyeh	37411	17	40	42	113
Ardebil .....	Ardebil	17800	10	27	24	69
Esfahan .....	Esfahan	107029	23	45	101	125
Alborz.....	Karaj	5124	4	10	16	22
Ilam .....	Ilam	20133	8	20	22	40
Bushehr .....	Bushehr	22743	9	23	32	44
Tehran .....	Tehran	13690	14	29	41	64
Chaharmahal & Bakhtiyari...	ShahreKord	16332	7	21	31	44
South Khorasan .....	Birjand	95385	8	19	25	49
Khorasan-e-Razavi .....	Mashhad	118854	27	69	72	163
North Khorasan .....	Bojnurd	28434	7	17	18	42
Khuzestan .....	Ahvaz	64055	24	55	61	130
Zanjan .....	Zanjan	21773	7	16	18	46
Semnan .....	Semnan	97491	5	13	18	29
Sistan & Baluchestan .....	Zahedan	181758	14	40	37	102
Fars .....	Shiraz	122608	29	83	93	204
Qazvin .....	Qazvin	15567	5	19	25	46
Qom .....	Qom	11526	1	5	6	9
Kordestan .....	Sanandaj	29137	10	27	25	84
Kerman .....	Kerman	180726	23	58	64	151
Kermanshah .....	Kermanshah	24998	14	30	29	85
Kohgiluyeh & Boyerahmad .	Yasuj	15504	7	17	16	43
Golestan .....	Gorgan	20367	14	27	25	60
Gilan .....	Rasht	14042	16	43	51	109
Lorestan .....	Khorramabad	28294	10	27	25	84
Mazandaran .....	Sari	23842	19	50	53	122
Markazi .....	Arak	29127	12	23	32	66
Hormozgan .....	BandarAbbas	70697	13	38	33	85
Hamedan .....	Hamedan	19368	9	25	27	73
Yazd .....	Yazd	129285	11	22	24	51

1. Only land area

Source: Ministry of the Interior.

**ADMINISTRATIVE DIVISION BY OSTAN : 1389**

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
<b>Total country .....</b>	<b>982</b>	<b>1144</b>	<b>2496</b>
<i>East Azarbeyjan .....</i>	<i>44</i>	<i>58</i>	<i>142</i>
Azarshahr .....	3	3	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	1	4
Kaleibar .....	2	2	7
Maragheh .....	2	2	6
Marand .....	2	5	9
Malekan .....	2	2	5
Miyaneh .....	4	4	17
Haris .....	2	5	6
Hashtrud .....	2	2	7
Varzaqan .....	2	2	7
<i>West Azarbeyjan .....</i>	<i>40</i>	<i>42</i>	<i>113</i>
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 eh .....	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 1389 (Continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
<i>Ardebil</i> .....	27	24	69
Ardebil .....	3	2	10
Bilehsavar .....	2	2	4
Parsabad .....	3	3	6
Khalkhal .....	3	3	8
Sareyn.....	2	1	4
Kowsar .....	2	1	4
Garmi .....	3	2	9
Meshkinshahr .....	4	5	12
Namin .....	3	3	7
Neer .....	2	2	5
<i>Esfahan</i> .....	45	101	125
Aran & Bidgol .....	2	4	3
Ardestan .....	2	3	7
Esfahan .....	6	14	19
Borkhar .....	2	6	4
Tiran & Karvan Khansar Khansar..	2	3	4
Chadegan .....	2	2	4
Khomeinishahr .....	1	3	3
Khansar .....	1	1	3
Khour& Biyabanak.....	1	3	3
Dehaghan.....	1	2	3
Semirom .....	2	4	7
shahin shahr& Meymeh .....	2	6	4
Shahreza .....	1	2	4
Faridan .....	2	5	9
Fereydunshahr .....	1	2	5
Falavarjan .....	2	7	6
Kashan .....	4	6	9
Golpayegan .....	1	3	3
Lenjan .....	2	8	5
Mobarakeh .....	2	5	5
Naeen .....	2	3	5
Najafabad .....	2	6	5
Natanz.....	2	3	5
<i>Alborz</i> .....	10	16	22
Savojbalagh.....	3	5	6
Taleghan.....	2	1	4
Karaj.....	3	8	7
Nazarabad.....	2	2	5
<i>Ilam</i> .....	20	22	40
Abdanan .....	3	3	6
Ilam .....	2	2	4
Ivan .....	2	2	4
Darrehshahr .....	3	2	6
Dehloran .....	3	4	6

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389 (continued)**

Ostan and Shahrestan	Number of Bakhses	Number of cities	Number of Bakhses
Shirvan & Chardavel .....	3	4	8
Malekshahi.....	2	3	4
Mehran .....	2	2	2
<b>Bushehr</b> .....	<b>23</b>	<b>32</b>	<b>44</b>
Bushehr .....	2	3	2
Tangestan .....	2	2	4
Jam .....	2	3	5
Dashtestan .....	6	8	12
Dashti .....	3	3	7
Dayyer .....	2	4	4
Deylam .....	2	2	4
Kangan .....	2	5	4
Genaveh .....	2	2	2
<b>Tehran</b> .....	<b>29</b>	<b>41</b>	<b>64</b>
Eslamshahr .....	2	2	4
Baharestan.....	2	3	4
Pakdasht.....	2	3	6
Pishva.....	2	1	4
Tehran.....	3	3	4
Damavand .....	2	5	5
Robatkarim .....	1	2	3
Rey .....	4	4	8
Shemiranat .....	2	3	3
Shahriar .....	1	7	6
Firuzkuh.....	2	2	5
ghods.....	1	1	2
malard .....	2	2	4
Varamin .....	3	3	6
<b>Chaharmahal &amp; Bakhtiari</b> ...	<b>21</b>	<b>31</b>	<b>44</b>
Ardal .....	2	1	4
Borujen .....	3	6	5
Shahr-e-Kord .....	4	11	8
Farsan .....	3	4	5
Kuhrang .....	3	1	7
keyar.....	2	4	5
Lordegan .. ....	4	4	10
<b>South Khorasan</b> .....	<b>19</b>	<b>25</b>	<b>49</b>
Boshroye .....	2	2	4
Birjand.....	2	3	10
Darmiyan .....	3	4	6
Sarayan .....	2	3	4
Sarbiskeh .....	2	2	4

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Ferdows .....	1	2	3
Qayenat .....	5	7	13
Nahbandan .....	2	2	5
<b><i>Khorasan-e-Razavi</i></b> .....	<b>69</b>	<b>72</b>	<b>163</b>
Bakharz.....	2	1	4
Bajestan.....	2	2	4
Bardeskan .....	3	3	6
binalood.....	2	2	4
Taybad .....	2	3	4
takht-e jolgeh.....	2	2	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
Dargaz .....	4	4	7
Rashtkhar .....	2	2	4
Zaveh.....	2	1	4
Sabzevar .....	4	4	14
Serakhs .....	2	2	6
Fariman .....	2	4	5
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>17</b>	<b>18</b>	<b>42</b>
Esfarayen .....	2	2	7
Bojnurd .....	3	3	8
Jajarm .....	3	3	5
Shirvan .....	3	2	9
Faruj .....	2	2	5
Germeh.....	1	3	2
Maneh and Samalqan .. ....	3	3	6
<b><i>Khuzestan</i></b> .. ....	<b>55</b>	<b>61</b>	<b>130</b>
Abadan .. ....	2	3	6
Omidiyeh .....	2	2	4
Andimeshk .. ....	2	2	4

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Endika .....	3	1	6
Ahvaz .....	2	2	10
Izeh .....	3	2	10
Baghmalek .....	3	4	8
Bavi.....	2	3	4
Bandar-e-Mahshahr .....	2	3	1
Behbahan .....	4	3	6
Khorramshahr .....	2	3	4
Dezful .....	4	6	11
Dasht-e-Azadegan .....	2	2	5
Ramshir .....	2	2	4
Ramhormoz .....	1	1	4
Shadegan .....	2	2	7
Shush .....	3	5	7
Shushtar .....	2	3	6
Gotvand .....	2	5	4
Lali .....	2	1	4
Masjed Soleyman .....	2	1	4
haftgol.....	2	1	3
Hendijan .....	2	2	4
hovayzeh.....	2	2	4
<b>Zanjan .....</b>	<b>16</b>	<b>18</b>	<b>46</b>
Abhar .....	2	4	8
Ijerud .....	2	2	4
Khodabandeh .....	4	5	10
Khorramdarreh .....	1	1	2
Zanjan .....	3	2	12
Tarom .....	2	2	5
Mahneshan .....	2	2	5
<b>Semnan .....</b>	<b>13</b>	<b>18</b>	<b>29</b>
Damghan .....	2	4	6
Semnan .....	2	2	3
Shahrud .....	4	6	12
Garmsar .....	3	3	5
mehdishahr.....	2	3	3
<b>Sistan &amp; Baluchestan .....</b>	<b>40</b>	<b>37</b>	<b>102</b>
Iranshahr .....	3	4	7
Chabahar .....	3	2	7
Khash .....	3	2	11
delgan .....	2	1	5
Zabol .....	3	5	9

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
zaboli.....	2	1	4
Zahedan .....	4	3	8
Zahak .....	2	1	4
Saravan .....	3	5	8
Sarbaz .....	4	3	11
sibsavaran.....	2	2	4
Konarak .....	2	2	4
Neekshahr.....	5	5	15
Hirmand.....	2	1	5
<i>Fars</i> .....	<b>83</b>	<b>93</b>	<b>204</b>
Abadeh .....	1	5	4
Arsanjan .....	1	1	3
Estahban .....	2	3	3
Eqlid .....	3	4	9
Bavanat .....	3	3	7
Pasargad .....	2	1	4
Jahrom .....	4	5	12
Kharameh.....	2	1	5
Khorrambid .....	2	2	3
Khonj .....	2	1	4
Darab .....	4	4	12
Rostam.....	2	1	4
Zarrindasht .....	2	3	5
Sepidan .....	3	3	8
sarvestan.....	2	2	4
Shiraz .....	3	6	12
Farashband .....	2	3	4
Fasa .....	4	4	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 .....	3	4	7
Marvdasht .....	5	4	15
Mamasani .....	3	2	9
Mohr .....	4	4	8
Neyriz .....	4	4	9
<i>Qazvin</i> .....	<b>19</b>	<b>25</b>	<b>46</b>
Abyek .....	2	2	5
Alborz .....	2	4	4
Boyinzahra .....	6	7	14

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Takestan .....	4	5	9
Qazvin .....	5	7	14
<i>Qom</i> .....	5	6	9
<i>Qom</i> .....	5	6	9
<i>Kordestan</i> .....	27	25	84
Baneh .....	4	4	8
Bijar .....	3	3	11
dehgalan.....	2	2	5
Divandarreh .....	3	2	9
Sarvabad .....	2	1	8
Saqqez .....	3	2	11
Sanandaj .....	2	2	10
Qorveh .....	3	4	9
Kamyaran .....	2	2	7
Marivan .....	3	3	6
<i>Kerman</i> .....	58	64	151
Arzooeyeh.....	2	1	5
Anar.....	1	2	2
Baft .....	2	2	6
Bardsir .....	4	4	8
Bam .....	2	2	4
Jiroft .....	3	3	11
Rabar.....	2	1	4
Ravar .....	2	2	3
Rafsanjan .....	4	5	14
Rudbar-e-Jonub .....	2	1	4
reegan.....	2	1	4
Zarand .....	2	4	10
Sirjan .....	5	5	10
Shahr-e-Babak .....	2	5	9
Anbarabad .....	3	3	10
Faryab.....	2	1	4
Fahraj.....	2	1	4
Ghaleh-Ganj .....	2	1	5
Kerman .....	6	13	16
Kahnuj .....	2	1	5
Kohbonan .....	2	2	4
Manujan .....	2	2	5
Narmashahr .....	2	2	4
<i>Kermanshah</i> .....	30	29	85
Eslamabad-e-Gharb .....	2	2	7
Paveh .....	3	4	5
Salas-e-Babajani .....	2	2	6
Javanrud .....	2	1	4
Dalahu .....	2	2	5
Ravansar .....	2	2	6

**1. 5. BAKHSHES, CITIES AND DEHESTANS BY OSTAN AND SHAHRESTAN AT THE END OF 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Sar-e-pol-e-Zahab .....	1	1	5
Sonqor .....	2	2	8
Sahneh .....	2	2	7
Qasr-e-Shirin .....	2	2	4
Kermanshah .....	5	4	13
Kangavar .....	1	1	5
Gilan-e-Gharb .....	2	2	6
Harsin .....	2	2	4
<b>Kohgiluyeh &amp; Boyerahmad .....</b>	<b>17</b>	<b>16</b>	<b>43</b>
Basht.....	2	1	4
Bahmaee .....	2	1	4
Boyerahmad .....	3	4	9
Cheram.....	2	1	4
Dena .....	3	3	6
Kohgiluyeh .....	4	5	12
Gachsaran .....	1	1	4
<b>Golestan .....</b>	<b>27</b>	<b>25</b>	<b>60</b>
Azadshahr .....	2	3	4
Aq Qala .....	2	2	5
Bandar Gaz .....	2	2	4
Torkaman .....	2	1	4
Ramyan .....	2	3	4
Aliabad .....	2	2	4
Kordkuy .....	1	1	3
Kalaleh .....	2	1	5
Galikesh.....	2	1	4
Gorgan .....	2	3	5
Gomishan.....	2	2	4
Gonbad-e-Kavus .....	2	2	6
Moradtapeh.....	2	1	4
Minudasht .....	2	1	4
<b>Gilan .....</b>	<b>43</b>	<b>51</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 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Fuman .....	2	2	6
Lahijan .....	2	2	7
Langrud .....	3	5	7
Masal .....	2	2	4
<i>Lorestān</i> .....	<b>27</b>	<b>25</b>	<b>84</b>
Azna .....	2	2	4
Aligudarz .....	3	2	11
Borujerd .....	2	2	7
Poldokhtar .....	2	2	7
Khorramabad .....	4	4	17
Delfan .....	2	2	10
Doreh.....	3	2	6
Dorud .....	2	2	5
Selseleh .....	2	2	6
Kuhdasht .....	5	5	11
<i>Mazandaran</i> .....	<b>50</b>	<b>53</b>	<b>122</b>
Amol .....	4	4	9
Babol .....	6	7	13
Babolsar .....	3	3	6
Behshahr .....	2	3	5
Tonkabon .....	3	4	7
Juybar .....	2	2	4
Chalus .....	3	3	6
Ramsar .....	1	2	4
Sari .....	5	3	13
Savadkuh .....	2	4	6
Abbasabad.....	2	3	4
Ferydonkenar.....	2	1	4
Qaemshahr .....	2	2	7
Galugah .....	2	1	4
Mahmoudabad .....	2	2	5
Miandrood.....	2	1	5
Neka .....	2	1	5
Nur .....	3	5	9
Noshahr .....	2	2	6
<i>Markazi</i> .....	<b>23</b>	<b>32</b>	<b>66</b>
Ashtian .....	1	1	3
Arak .....	3	6	11
Tafresh .....	1	1	3
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 1389 (continued)**

Ostan and Shahrestan	Number of Bakhshes	Number of cities	Number of Dehestans
Zarandiyeh.....	2	5	6
Saveh .....	2	3	7
Shazand .....	4	5	9
Farahan.....	2	1	5
Komeijan .....	2	2	4
Mahallat .....	1	2	2
<i>Hormozgan</i> .....	<b>38</b>	<b>33</b>	<b>85</b>
Abumusa .....	2	1	2
Bastak .....	3	2	7
Bashagerd.....	3	2	6
Bandar Abbas .....	4	4	11
Bandar Lengeh .....	4	4	8
parsiany .....	2	2	4
Jask .....	2	1	5
Hajiabad .....	3	3	6
Khamir .....	2	2	4
Rudan .....	4	3	10
Sireek.....	2	2	4
Qeshm .....	3	4	7
Minab .....	4	3	11
<i>Hamedan</i> .....	<b>25</b>	<b>27</b>	<b>73</b>
Asadabad .....	2	1	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
<i>Yazd</i> .....	<b>22</b>	<b>24</b>	<b>51</b>
Abarkuh .....	2	2	4
Ardakan .....	3	3	5
Bafgh .....	1	1	3
Behabad.....	2	1	3
Taft .....	3	2	10
Khatam .....	2	2	4
Sadugh .....	2	3	3
Tabas .....	3	3	8
Mehriz .....	1	1	5
Meybod .....	1	2	2
Yazd .....	2	4	4

Source: Ministry of the Interior.

**1. 6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS  
FROM THE YEAR OF ESTABLISHMENT TO DEY 1382**

Capital of Ostan	Station characteristics		Air temperature (0c)				
	Year of establishment	Altitude (m)	Average max	Average min	Absolute max	Absolute min	Mean
Arak .....	1334	1708	27.0	6.9	44.0	-30.5	13.8
Ardebil .....	1355	1314	15.2	2.7	39.8	-33.8	9.0
Orumiyeh .....	1330	1313	17.6	5.5	38.0	-22.8	11.5
Esfahan .....	1330	1600	23.4	9.0	43.0	-19.4	16.2
Ahvaz .....	1330	23	32.9	17.6	54.0	-7.0	25.3
Ilam .....	1365	1363	22.2	11.6	40.6	-12.6	16.9
Bojnurd .....	1356	1091	19.7	6.8	42.3	-25.0	13.3
Bandar Abbas .....	1336	10	32.1	21.8	51.0	2.0	27.0
Bushehr .....	1330	20	29.7	19.5	50.0	-1.0	24.6
Birjand .....	1334	1491	24.5	8.4	44.0	-21.5	16.5
Tabriz .....	1330	1361	18.0	6.8	42.0	-25.0	12.4
Tehran .....	1330	1190	22.6	11.8	43.0	-15.0	17.2
Khorramabad .....	1330	1125	25.2	9.1	47.0	-14.6	17.2
Rasht .....	1335	-7	20.5	11.2	40.0	-19.0	15.9
Zahedan .....	1330	1370	26.7	10.1	43.0	-22.0	18.4
Zanjan .....	1334	1663	18.0	4.0	43.0	-30.0	11.0
Sari .....	1379	23	22.1	13.5	39.8	-3.8	17.7
Semnan .....	1340	1171	23.7	12.4	44.0	-11.0	18.1
Sanandaj .....	1338	1373	21.4	5.4	44.0	-31.0	13.4
Shahr-e-Kord .....	1334	1991	20.2	3.5	42.0	-32.0	11.8
Shiraz .....	1330	1488	25.6	9.8	43.2	-14.0	17.7
Qazvin .....	1338	1278	21.2	6.8	43.0	-24.0	14.0
Qom .....	1365	877	25.8	10.0	46.0	-12.6	17.9
Kerman .....	1330	1754	24.7	6.9	42.0	-30.0	15.8
Kermanshah .....	1330	1322	22.6	5.8	44.1	-27.0	14.2
Gorgan .....	1331	13	22.7	12.7	45.0	-10.0	17.7
Mashhad .....	1330	990	21.1	7.0	43.8	-28.0	14.1
Hamedan .....	1355	1749	19.1	3.3	40.0	-32.8	11.2
Yasuj .....	1366	1880	22.3	8.1	40.4	-19.8	15.2
Yazd .....	1331	1230	26.5	11.7	45.6	-16.0	19.1

**1. 6. METEOROLOGICAL DATA FROM SYNOPTIC STATIONS IN CAPITALS OF OSTANS  
FROM THE YEAR OF ESTABLISHMENT TO DEY 1382 (continued)**

Capital of Ostan	Average annual precipitation (mm)	Max. daily precipitation (mm)	Mean of relative humidity (%)		Average number of frosty days
			6:30	12:30	
Arak .....	342	80	60	38	91
Ardebil .....	303	63	85	58	131
Orumiyeh .....	345	79	74	49	110
Esfahan .....	121	48	55	30	74
Ahvaz .....	213	107	62	34	1
Ilam .....	624	103	47	31	34
Bojnurd .....	269	54	76	46	93
Bandar Abbas .....	186	211	80	53	0
Bushehr .....	277	150	77	51	0
Birjand .....	171	52	49	25	76
Tabriz .....	290	63	67	44	102
Tehran .....	231	50	51	33	48
Khorramabad .....	510	71	63	35	48
Rasht .....	1354	170	94	72	26
Zahedan .....	91	62	46	22	54
Zanjan .....	314	51	71	43	121
Sari .....	743	60	86	62	6
Semnan .....	139	41	51	34	46
Sanandaj .....	462	73	69	37	106
Shahr-e-Kord .....	318	76	64	35	124
Shiraz .....	341	128	57	29	46
Qazvin .....	317	47	69	38	90
Qom .....	150	40	58	29	65
Kerman .....	154	60	49	24	89
Kermanshah .....	447	108	64	37	94
Gorgan .....	600	105	79	58	14
Mashhad .....	255	52	69	42	91
Hamedan .....	317	56	74	43	125
Yasuj .....	841	120	61	32	63
Yazd .....	62	48	44	24	52

Source: I. R. I. Meteorological Organization.

## 1. 7. CLIMATIC CONDITIONS OF CAPITALS OF OSTANS, 1389

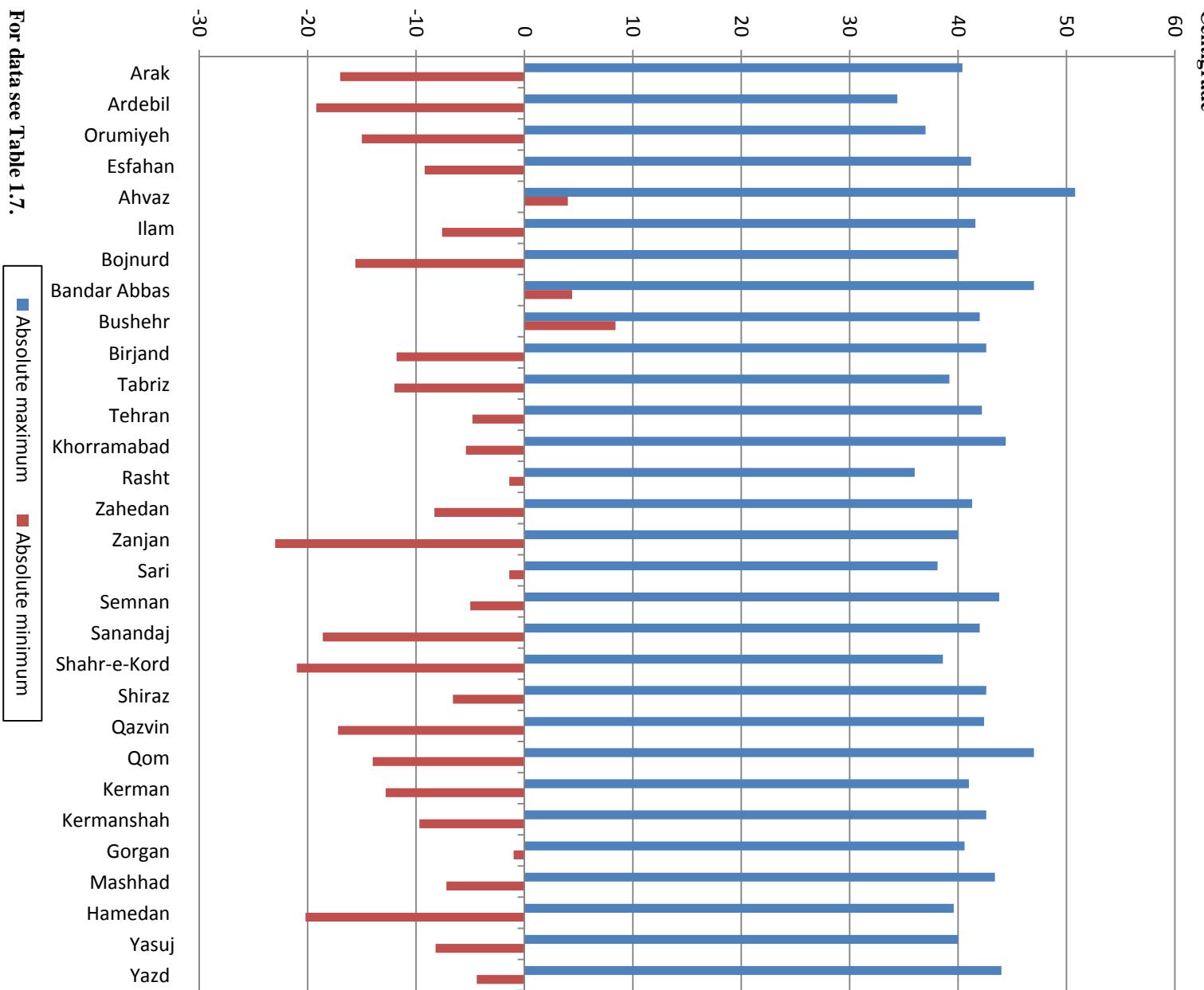
Capital of Ostan	Air temperature (0c)					Annual precipitation (mm)
	Average max	Average min	Absolute max	Absolute min	Mean	
Arak .....	21.7	7.3	-17	40.4	14.5	261.9
Ardebil .....	17.8	3.8	-19.2	34.4	10.8	236.6
Orumiyah .....	19.6	5	-15	37	12.3	342
Esfahan .....	24.7	9.6	-9.2	41.2	17.1	97.7
Ahvaz ....	34.3	19.9	4	50.8	27.1	173.4
Ilam .....	24.3	10.5	-7.6	41.6	17.4	472.5
Bojnurd .....	20.9	6.9	-15.6	40	13.9	232.1
Bandar Abbas .....	33	21.7	4.4	47	27.4	98.7
Bushehr .....	29.1	23.3	8.4	42	26.2	145.2
Birjand .....	25.2	8.1	-11.8	42.6	16.7	82.7
Tabriz .....	20.5	7.8	-12	39.2	14.2	179.8
Tehran .....	23.6	13.6	-4.8	42.2	18.6	213
Khorramabad .....	26.2	8.9	-5.4	44.4	17.6	415
Rasht .....	21.9	13.2	-1.4	36	17.5	1126.5
Zahedan .....	27.2	10.4	-8.3	41.3	18.8	98.6
Zanjan .....	19.4	4.4	-23	40	11.9	233.1
Sari .....	23.9	13.9	-1.4	38.1	18.9	547.2
Semnan .....	25	13.1	-5	43.8	19	104.5
Sanandaj .....	23.4	6.1	-18.6	42	14.8	310.7
Shahr-e-Kord .....	20.9	1.5	-21	38.6	11.2	274.1
Shiraz .....	26.8	10	-6.6	42.6	18.4	239.4
Qazvin .....	22.4	7.3	-17.2	42.4	14.8	353.2
Qom .....	27.3	10.9	-14	47	19.1	86.9
Kerman .....	25.5	7.5	-12.8	41	16.5	119.2
Kermanshah .....	24.6	7.4	-9.7	42.6	16	342
Gorgan .....	24.4	13.7	-1	40.6	19.1	360.3
Mashhad .....	23.3	9.1	-7.2	43.4	16.2	155.5
Hamedan .....	20.7	4	-20.2	39.6	12.3	300.8
Yasuj .....	23.9	7.2	-8.2	40	15.6	768.5
Yazd .....	27.9	13.5	-4.4	44	20.7	35.9

## 1. 7. CLIMATIC CONDITIONS OF CAPITALS OF OSTANS, 1389 (CONTINUED)

Capital of Ostan	Max. daily precipitation (mm)	Mean of relative humidity (%)		Number of frosty days	Bright sunshine (hours)	Max. speed of wind (mps)
		6:30	12:30			
Arak .....	35.4	46	33	101	2931.3	15
Ardebil .....	18.6	86	51	110	2757.3	25
Orumiyah .....	23.6	82	35	128	3081.2	15
Esfahan .....	14.9	52	17	78	3438.4	22
Ahvaz .....	43.4	63	21	0	3089.3	13
Ilam .....	47.8	50	28	42	3125.7	18
Bojnurd .....	16	70	44	113	2967.3	18
Bandar Abbas .....	52.8	73	45	0	3150.5	14
Bushehr .....	21.7	72	60	0	3167.9	15
Birjand .....	12.4	45	22	92	3450	17
Tabriz .....	22.1	63	36	94	2990.9	22
Tehran .....	24	45	26	29	3104.4	19
Khorramabad .....	37.8	58	27	70	3109.8	22
Rasht .....	75.5	91	69	6	1884.9	13
Zahedan .....	24.7	62	8	64	3466.6	25
Zanjan .....	26.5	69	38	120	2966.7	20
Sari .....	62.1	84	57	4	2355.1	15
Semnan .....	16.3	49	29	47	3216.5	14
Sanandaj .....	29.9	68	32	101	3067.8	13
Shahr-e-Kord .....	22.9	64	29	146	3317.4	19
Shiraz .....	29.5	61	18	72	3328.9	25
Qazvin .....	29.2	76	29	82	3129.8	20
Qom .....	15.5	63	23	76	3185	24
Kerman .....	41	48	22	96	3535.1	25
Kermanshah .....	28.9	61	31	88	2899.8	19
Gorgan .....	34.7	78	54	6	2515.2	15
Mashhad .....	16.7	54	29	75	3048.8	15
Hamedan .....	25.7	60	33	124	3096.9	17
Yasuj .....	78	69	25	75	3071.5	15
Yazd .....	10.5	39	14	27	3442.3	22

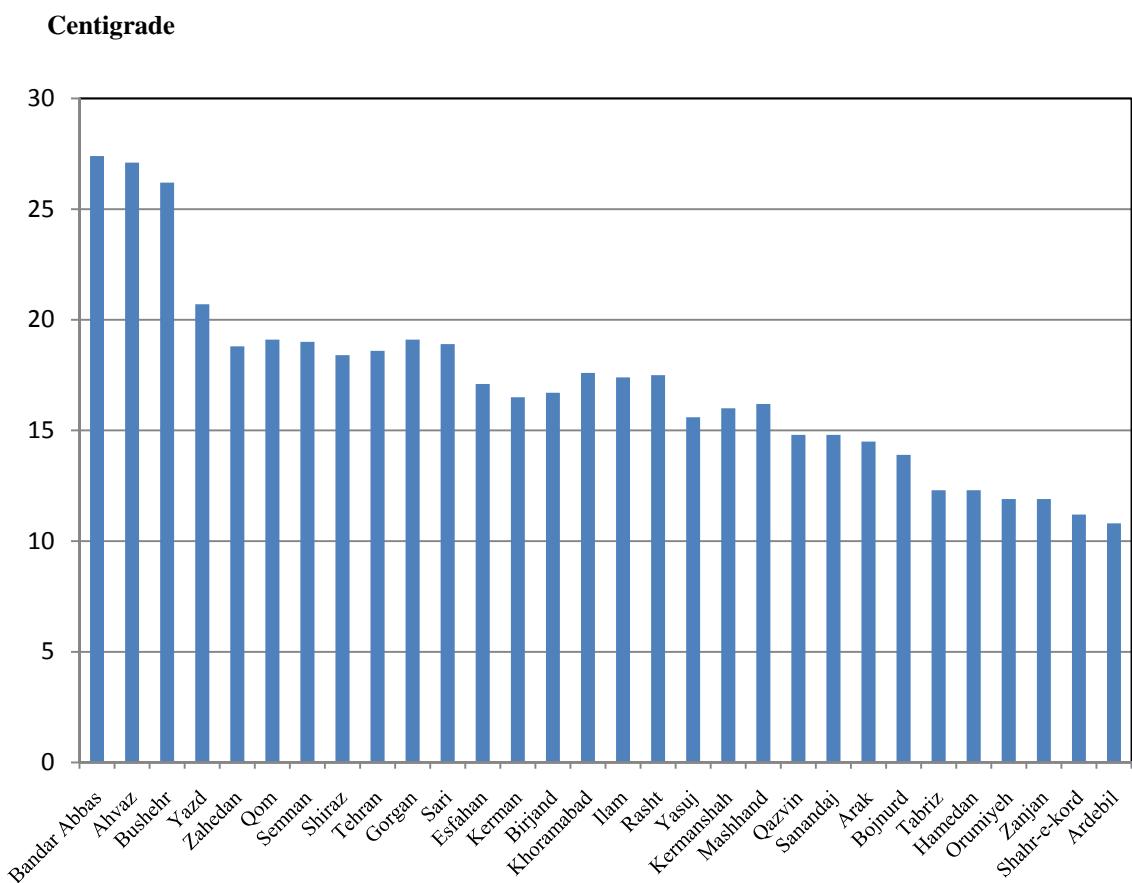
Source: I.R.I. Meteorological Organization.

**1.1. ABSOLUTE MAXIMUM AND MINIMUM TEMPERATURES IN CAPITALS  
OF OSTANS, 1389**

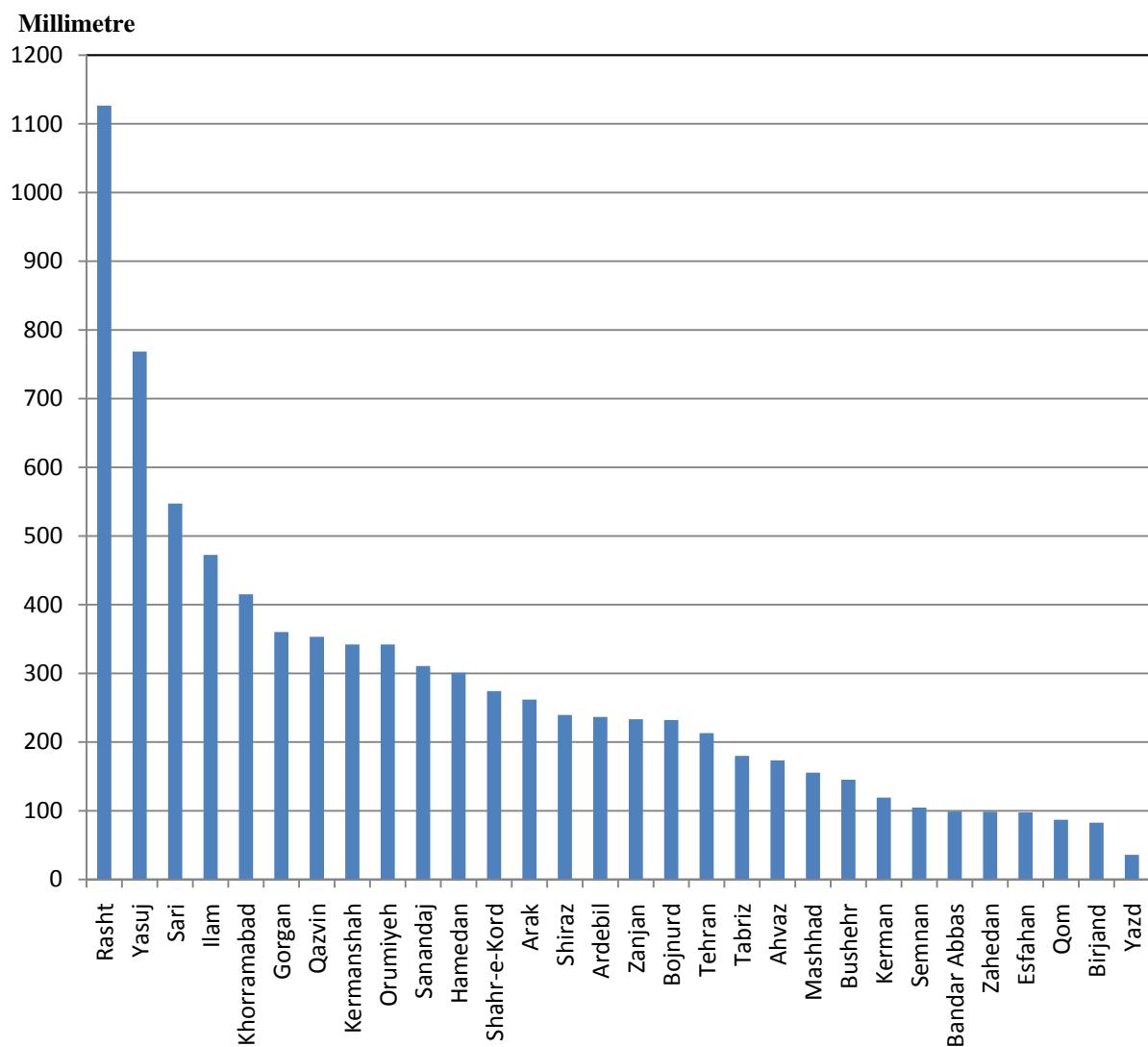


For data see Table 1.7.

■ Absolute maximum ■ Absolute minimum

**1. 2. AVERAGE ANNUAL TEMPERATURES IN CAPITALS OF  
OSTANS, 1389**

For data see Table 1.7.

**1. 3. ANNUAL RAINFALL IN CAPITALS OF OSTANS, 1389**

For data see Table 1.7.

**1. 8. ABSOLUTE MAXIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH, 1389  
(°c)**

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	25.2	30.4	36.6	40.4	37.8	35.4
Ardebil.....	22.4	27.6	33.8	34.4	33	34.2
Orumiyeh .....	22	28	34.2	36.8	37	35.2
Esfahan.....	25.4	33.6	37.8	41.2	40.4	37
Ahvaz .....	37	44.4	50.8	49.8	49.2	48.2
Ilam.....	23.6	30.2	39.6	41.6	39.6	39.4
Bojnurd .....	27.4	30.2	37.2	40	38.6	35
Bandar Abbas .....	38.6	40	47	40.5	45.2	43.9
Bushehr .. ....	36.6	35.6	38.8	40	42	40
Birjand .....	30.2	36.2	39.2	42.6	39.2	36.4
Tabriz .. ....	24.2	27.8	36	39.2	36.8	37
Tehran .. ....	26.4	33	38.4	42.2	39.2	37.4
Khorramabad .....	26.4	32.8	42	44.4	42.6	41.2
Rasht .. ....	21.8	29	33.4	35	36	34.5
Zahedan .. ....	34	38.5	40.6	41.3	40.1	37.3
Zanjan .. ....	22	26	34.4	40	36.8	33
Sari.....	26.6	33.4	35.7	37	38.1	36
Semnan .. ....	28.4	35	40.2	43.8	40.6	38
Sanandaj .. ....	25.4	29.4	39.6	42	40.2	38.6
Shahr-e-Kord .....	21	28.6	34.9	38.6	35.4	33.8
Shiraz .. ....	27.4	35.4	39.4	42.6	41	39
Qazvin .. ....	25.6	30.4	36.8	42.4	39.8	38
Qom .. ....	31	38	43	47	43	42
Kerman .. ....	29.4	35.8	37.4	41	39.2	36.6
Kermanshah .....	24.6	30.5	40.2	42.6	40.9	39.2
Gorgan .. ....	25.8	36	39.2	40.6	38	37.4
Mashhad .. ....	28.2	37.4	40.2	43.4	39.9	37
Hamedan .. ....	22.7	27	36	39.6	37.6	35
Yasuj .. ....	24.4	31.8	38.2	40	38.5	36.4
Yazd .. ....	31.4	38.6	41.6	44	43.6	38.5

**1. 8. ABSOLUTE MAXIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH, 1389<sup>°</sup>  
(continued) (c)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	31.4	26	18.6	13.4	14	22.2
Ardebil.....	32.6	21.4	21	15	9.8	19.4
Orumiyeh .....	28.6	22.6	18.6	9	11.5	18
Esfahan.....	37.7	26.6	20.6	14.6	16.2	24
Ahvaz .....	44	40.6	27.8	23.6	23.6	29.6
Ilam.....	34.8	32.2	25.2	17.6	14	22.8
Bojnurd .....	32.6	22.6	19.6	17	14	21.6
Bandar Abbas .....	41	37	33.7	30.2	26.3	33.3
Bushehr .....	36.8	33.4	27	25	24.2	27.4
Birjand .....	33	28	21.6	18	16.2	27.6
Tabriz .....	31.2	23.6	19.4	11	11	18.6
Tehran .....	32.4	27	20.8	14.2	14	21.6
Khorramabad .....	36.6	31.8	25.6	16	15.8	24.2
Rasht .....	30.4	25	27	17.6	22	24.2
Zahedan .....	34.8	28.1	23.1	19.6	20.1	29.7
Zanjan .....	31.2	23.8	19.4	13.8	8.6	21
Sari.....	36.8	29.2	31.7	22.2	21.2	24.4
Semnan .....	34.4	29.4	20.2	14.4	15.8	23
Sanandaj .....	34.8	28.6	21.2	12.4	13.7	24.3
Shahr-e-Kord .....	29.2	24.2	18.6	13	11.2	21.2
Shiraz .....	34.2	30.2	21.6	19.6	16.6	23.6
Qazvin .....	32.4	25	20	13	12.8	21.6
Qom .....	37	29	24	16	19	25
Kerman .....	32.2	27	23	19.8	19	26.2
Kermanshah .....	34.9	29	21.2	14.5	16.3	24.2
Gorgan .....	37.8	29.6	28.8	20.6	20.2	25.6
Mashhad .....	35.6	27.8	23.1	16.6	18.5	23.5
Hamedan .....	31.2	26.6	24.7	10.8	12.9	21.1
Yasuj .....	32	29.2	21.6	16.5	14.2	23
Yazd .....	36	30.4	25.6	20.4	19.8	28.2

Source: I. R. I. Meteorological Organization.

**1. 9. ABSOLUTE MINIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH, 1389<sup>°</sup>  
(<sup>°</sup>C)**

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak.....	-1	5	10	12.8	15.4	11
Ardebil.....	-10	-0.6	4.8	8	3	5.4
Orumiyeh .....	-4.2	3.6	5.3	9.5	10.7	8.5
Esfahan.....	2.6	9.2	14.4	17.4	15.8	11
Ahvaz .....	10.4	18	22	27.2	28.4	22
Ilam.....	0.2	6	9.8	13.2	18	15
Bojnurd .....	-2.8	3.6	9.6	14.6	14.9	4.1
Bandar Abbas .....	19.4	22	26	27.2	26	23.5
Bushehr .....	18.2	21.6	24.4	27	30.2	27.4
Birjand .....	1	5.6	11.4	16.2	12.6	2.2
Tabriz .....	-2.9	4.8	10	14.8	15.6	13.4
Tehran ....	1	9.2	18.6	20.2	20.8	15.2
Khorramabad .....	-0.4	6	7.6	12	17	12
Rasht .....	1.2	8.6	16.8	20	16.6	15.4
Zahedan .....	6.2	9.8	12.6	16.7	15.5	6.4
Zanjan .....	-4.2	1.2	3	10.2	8	6.8
Sari .....	2.1	7.6	15.9	20.3	21	16.4
Semnan .....	3.8	10.8	16	23.6	21	15.6
Sanandaj .....	-2.4	4	5.3	12	14.8	10.4
Shahr-e-Kord .....	-9.2	-2.4	-0.4	4.8	7.4	4
Shiraz .....	4	8.8	13.8	15.4	16.4	14.4
Qazvin .....	-2.4	4.6	9.8	14.6	14	8.6
Qom .....	3	11	14	21	17	13
Kerman .....	3	7.8	9.8	14.2	11.4	6
Kermanshah .....	-2	3.2	6.4	11.5	14.4	11.4
Gorgan .....	2	7	14	20.2	22	16
Mashhad .....	-1.6	8.8	14.5	18.4	16.2	7.3
Hamedan ... .....	-4.8	1.2	3.5	7.4	10.8	7.5
Yasuj ... .....	1.2	5	9.2	11.4	14	10
Yazd .....	6.8	13.8	19.8	24.4	18.4	14.2

**1. 9. ABSOLUTE MINIMUM TEMPERATURE IN CAPITALS OF OSTANS BY MONTH, 1389<sup>°</sup>(c)**  
**(continued)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak.....	7	-2.2	-4.8	-15.6	-17	-5.4
Ardebil.....	2.6	-8.2	-9.8	-19.2	-18.6	-11.8
Orumiye.....	1.9	-2.4	-6.2	-15	-13.9	-7.7
Esfahan.....	9.8	-1.8	-5	-9.2	-6.2	-4
Ahvaz .....	18.2	10	5	4	4.2	6.8
Ilam.....	8.6	4.4	-1	-4	-7.6	-3
Bojnurd .....	6	-3	-7	-15.6	-11.6	-6
Bandar Abbas .....	21.4	9	8	4.4	9.5	12.2
Bushehr .....	22.4	16.6	11.8	8.4	8.4	12
Birjand .....	5.4	-4.2	-8.6	-11.8	-6.2	-3.8
Tabriz .....	5.4	-1.4	-5.3	-11.6	-12	-7.8
Tehran .....	15	7	0.6	-4	-4.8	-2
Khorramabad .....	-1.8	-0.8	-3.8	-5.2	-5.4	-2.4
Rasht .....	13	6.6	3.6	-1	-1.4	0
Zahedan .....	7.8	-2	-6.2	-8.3	-4.4	0.9
Zanjan .....	3.2	-4.4	-9.4	-23	-22.8	-11.4
Sari .....	14.2	5.6	3.1	-1.4	-0.2	0.2
Semnan .....	13.8	3.8	-1.4	-5	-4.8	-2.4
Sanandaj .....	4.8	-5	-7.4	-18.6	-18	-5.6
Shahr-e-Kord .....	0.4	-9.6	-12	-19.2	-21	-12.8
Shiraz .....	8.2	-2.4	-5	-6.6	-4	-2.4
Qazvin .....	8	-0.4	-4	-17.2	-13.8	-7.1
Qom .....	11	0	-3	-14	-4	-3
Kerman .....	5.8	-6.6	-7.8	-12.8	-5.4	-3.2
Kermanshah .....	4.6	-1.5	-4.8	-7.6	-9.7	-7.5
Gorgan .....	12.2	5	2	-1	0	0
Mashhad .....	5.2	1	-4	-7.2	-5	-5.2
Hamedan .....	3.3	-4.7	-6.5	-19	-20.2	-7.1
Yasuj .....	6.8	-2.6	-4	-8.2	-7.4	-3.6
Yazd .....	14.4	0.8	0	-4.4	-2	-1.4

Source: I. R. I. Meteorological Organization.

**1. 10. MONTHLY AVERAGE TEMPERATURE IN CAPITALS OF OSTANS, 1389** (°c)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	12.5	16.7	24.1	28.5	26	23.4
Ardebil.....	8.1	12.4	18.2	19.9	19.5	17.4
Orumiyeh .....	9.3	13.6	20.8	24.1	23.8	21.6
Esfahan.....	15.7	20.6	26.7	30.7	26.7	24.7
Ahvaz .....	25	30.7	37.1	38.3	39.2	36.5
Ilam....	13.1	18.1	25.7	28.5	29.7	27.3
Bojnurd .....	11	16.2	22.8	26.7	25.8	21
Bandar Abbas .....	27.4	29.8	33.6	34.5	34.1	33.1
Bushehr .....	24.7	28.3	31.8	33.3	34.8	33.6
Birjand .....	16.9	21.8	25.6	29.7	25	22.1
Tabriz .....	10.8	14.9	23.3	27.7	27.5	24.5
Tehran .....	15.9	20.8	28.7	32.2	29.5	26.7
Khorramabad .....	14	18.6	25.6	29	30.8	27.3
Rasht .....	12.2	17.3	25.2	27.7	27.9	24.8
Zahedan .....	20.7	24.9	27.6	30.2	26.7	23.7
Zanjan .....	9.7	13.5	20.4	24.4	22.6	20.8
Sari .....	13.8	18.9	26.3	29.4	29.8	26.4
Semnan .....	17.2	22.9	29.5	33.7	30.3	26.8
Sanandaj .....	12.4	16.2	23.2	27.1	28	25.3
Shahr-e-Kord .....	9.3	12.9	19.2	22.9	21.3	19.1
Shiraz .....	16.7	21.4	27.5	30.3	28.2	26.3
Qazvin .....	12	15.9	24	28	25.9	23.4
Qom .....	18	22.6	29.6	32.6	30.1	27.2
Kerman .....	17.1	20.9	25.5	29	24.5	22.3
Kermanshah .....	12.3	16.8	24.9	28.7	29.5	26.4
Gorgan .....	13.7	19.1	27.5	30.7	30.2	27
Mashhad .....	13.7	20.1	25.9	29.4	26.7	22.7
Hamedan .....	10.6	14.1	20.3	25	23.7	21.3
Yasuj .....	13	17	24.1	27.1	25.7	23.4
Yazd ....	19.5	25.2	30.8	34.7	29.5	27.8

**1. 10. MONTHLY AVERAGE TEMPERATURE IN CAPITALS OF OSTANS, 1389 (Continued)**  
 (c)

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	19.6	11	6.6	-0.7	-0.1	6
Ardebil.....	17	8.6	7.9	-0.5	-0.5	1.6
Orumiyeh .....	17	9.6	5.6	-1.1	-0.9	4
Esfahan.....	21.9	12.5	7.5	3.4	5.3	9.5
Ahvaz .....	32	24.4	16.9	13.6	13.5	18.4
Ilam.....	22.3	15.8	10.8	5.6	3.8	8.3
Bojnurd .....	19.3	10.2	6.5	0.5	2	4.7
Bandar Abbas .....	30.9	25.8	20.2	18.2	18.2	22.6
Bushehr .....	30.5	25.7	19.9	16.8	15.7	19.3
Birjand .....	20.4	12.5	6.9	3.3	6	9.7
Tabriz .....	19.1	11	6.5	0	0	4.6
Tehran .....	24	15.2	11.2	4.9	5.4	8.9
Khorramabad .....	21.4	14.9	8.8	5.7	5.3	9.3
Rasht .....	21.7	15.3	14.7	8.5	7.6	7.6
Zahedan .....	21.7	13.3	8.7	5.7	9.3	12.9
Zanjan .....	17.2	9.2	5.6	-2.1	-1.8	3.8
Sari .....	23.5	16.4	15	9.3	8.8	9.1
Semnan .....	24.3	15.2	9.7	4.4	5.1	9.2
Sanandaj .....	19.2	11.9	6	0.8	0.4	7.1
Shahr-e-Kord .....	15.1	7.8	3.6	-0.8	-0.5	4.5
Shiraz .....	22.1	14.4	9.1	6.7	6.7	11.5
Qazvin .....	20.5	11.9	7.8	1.2	1.6	5.8
Qom .....	24	14.4	9.2	3.8	6.8	9.7
Kerman .....	19.8	11.2	6.9	4	6.2	10.8
Kermanshah .....	20.7	12.8	7.1	2.9	2.2	8
Gorgan .....	23.7	16.5	14.4	8.9	8.4	8.7
Mashhad .....	20.7	12.3	9.5	3.6	4.5	5.4
Hamedan .....	17.3	9.5	5.3	-1.5	-2.3	4.6
Yasuj ....	19.7	12.4	8.1	4.7	3.5	8.1
Yazd ....	25.1	15.9	11.9	5.9	8.8	13.1

Source: I.R. I. Meteorological Organization.

**1. 11. ANNUAL PRECIPITATION IN CAPITALS OF OSTANS (mm)**

Capital of Ostan	1370	1375	1380	1385	1386	1387	1388	1389
Arak .....	320	303	260	283	380	191	322	262
Ardebil.....	000	347	234	237	269	189	296	237
Orumiyeh .....	269	263	228	372	252	266	300	342
Esfahan.....	112	67	94	220	114	85	179	98
Ahvaz .....	292	152	235	184	159	95	186	173
Ilam .....	676	578	598	555	333	261	477	473
Bojnurd .....	000	000	000	241	228	233	282	232
Bandar Abbas .....	244	167	85	277	99	51	186	99
Bushehr ..	171	217	488	224	181	86	156	145
Birjand .....	000	000	000	135	123	147	233	83
Tabriz .....	236	259	210	129	203	197	233	180
Tehran .....	260	156	192	227	294	139	238	213
Khorramabad .....	516	428	440	510	468	317	475	415
Rasht .....	1298	1015	1262	1476	1134	1058	1088	1127
Zahedan .....	44	73	14	55	108	58	99	99
Zanjan .....	286	249	232	308	346	152	325	233
Sari .....	000	000	591	684	676	715	955	547
Semnan .....	194	128	73	177	166	91	141	105
Sanandaj .....	382	413	310	449	361	229	414	311
Shahr-e-Kord .....	491	258	334	413	225	200	420	274
Shiraz .....	272	202	317	305	222	114	270	239
Qazvin .....	000	000	232	325	305	162	338	353
Qom .....	000	78	125	111	204	97	165	87
Kerman .....	115	123	119	134	81	99	78	119
Kermanshah .....	451	396	357	430	344	292	415	342
Gorgan .....	000	000	468	522	332	422	649	360
Mashhad .....	326	170	153	223	202	165	277	156
Hamedan .....	292	213	225	283	358	221	396	301
Yasuj .....	1202	474	1126	777	682	367	561	769
Yazd .....	60	29	60	44	43	53	45	36

Source: I.R. I. Meteorological Organization.

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

Ostan	1380	1385	1386	1387	1388	1389	Long term
<b>Total country .....</b>	<b>195.98</b>	<b>147.68</b>	<b>137.11</b>	<b>113.22</b>	<b>249.68</b>	<b>201.69</b>	<b>245.35</b>
East Azarbayjan .....	206.66	204.80	203.28	114.22	287.85	253.36	266.03
West Azarbayjan .....	278.78	289.83	226.69	180.83	374.10	334.72	366.09
Ardebil .....	291.21	195.15	274.69	144.53	365.61	341.60	339.70
Esfahan .....	136.10	127.9	108.34	97.26	195.20	145.77	178.48
Ilam .....	432.08	245.55	156.29	178.50	386.53	365.15	444.81
Bushehr .....	457.87	174.04	77.44	76.11	280.00	182.08	315.30
Tehran .....	235.47	185.01	253.13	130.47	290.00	283.77	299.09
Chaharmahal & Bakhtiyari .....	670.53	432.25	376.16	331.33	647.53	540.78	684.82
South Khorasan .....	( <sup>1</sup> )000	36.53	47.01	86.94	146.25	81.29	135.89
Khorasan-e-Razavi .....	( <sup>1</sup> )114.95	86.85	107.37	98.52	232.69	163.17	203.03
North Khorasan .....	( <sup>1</sup> )000	185.51	227.16	150.73	339.32	273.00	320.26
Khuzestan .....	360.70	195.36	153.91	120.45	293.75	261.39	346.34
Zanjan .....	237.74	211.37	308.02	129.64	358.87	323.32	329.98
Semnan .....	110.04	105.22	113.02	80.09	142.47	117.20	152.90
Sistan & Baluchestan .....	31.95	48.78	81.64	67.24	137.08	107.18	112.92
Fars .....	305.62	205.79	122.70	92.64	317.05	260.11	333.98
Qazvin .....	330.04	266.95	285.19	179.91	361.22	378.05	348.81
Qom .....	107.95	99.01	150.45	85.83	170.40	115.92	169.75
Kordestan .....	399.62	309.74	280.88	234.30	456.10	407.02	469.71
Kerman .....	93.08	58.79	40.88	45.64	139.67	112.63	134.01
Kermanshah .....	370.12	285.22	208.60	248.49	469.26	391.59	465.51
Kohgiluyeh & Boyerahmad .....	712.05	286.45	298.55	202.26	553.75	488.65	562.65
Golestan .....	382.98	302.73	293.43	237.03	532.67	379.66	492.57
Gilan .....	1057.41	897.20	623.91	666.38	841.07	916.54	1050.92
Lorestan .....	405.97	336.20	404.61	239.06	460.64	414.99	470.46
Mazandaran .....	774.84	570.26	495.96	536.59	751.63	585.17	755.96
Markazi .....	193.89	190.95	235.24	140.34	351.18	252.87	291.17
Hormozgan .....	105.33	93.91	48.84	39.15	197.52	121.08	169.57
Hamedan .....	271.51	248.53	296.76	194.88	401.94	356.54	350.17
Yazd .....	76.19	46.52	37.49	51.52	94.40	57.89	98.07

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

## **1.4. AVERAGE PRECIPITATION HEIGHT RATIO IN OSTANS IN THE YEAR 1389 TO THE LONG-TERM AVERAGE**



**1. 13. MONTHLY PRECIPITATION IN CAPITALS OF OSTANS, 1389**

(mm)

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	57.7	39.3	0.1	0	0	6.2
Ardebil .....	23.8	79.2	14.7	9.1	2.8	18.2
Orumiye .....	48.6	109.7	7.8	0	0	27.2
Esfahan .....	45.3	9	0	0	0	1.2
Ahvaz .....	37.2	8	0	0	0	0
Ilam .....	97.7	78.3	0	0	6	0
Bojnurd .....	22	66.6	7	7	0	11.2
Bandar Abbas .....	1.2	0	0	0	0	0
Bushehr .....	7.7	1.6	0	0	0	0
Birjand .....	8.3	18.1	0	0.2	0	0
Tabriz .....	16.8	75.4	5.4	1.7	0.4	11.2
Tehran .....	50.7	23.3	0	0	0	0
Khorramabad .....	55.8	92.7	0	0	0	0
Rasht .....	61.6	109.2	11.3	2	32.5	47.5
Zahedan .....	0	12.1	0	0	0	0
Zanjan .....	43.7	99.4	4.6	0	0	0
Sari .....	37.1	37.2	0	8.6	8.5	18.1
Semnan .....	12.7	4.4	0.8	0	0	12.2
Sanandaj .....	66.8	74.4	1	0	0	0
Shahr-e-Kord .....	91.9	7.6	0.4	0	0	0
Shiraz .....	25.9	7.9	0.5	0	0	2.6
Qazvin .....	66	125.2	0.8	0	0	0
Qom .....	7.7	16.7	1	0	0	0.2
Kerman .....	0.2	10.6	0	0	0	0
Kermanshah .....	60.9	79.7	2.7	0	0	6.8
Gorgan .....	18.8	41.4	0	15.8	0	29.3
Mashhad .....	27.6	35.1	3.5	1	0	2.4
Hamedan .....	54.7	75.7	5.9	0	0.1	1.9
Yasuj .....	71.3	67.1	0.8	0	0	0.6
Yazd .....	7.6	0	0	0	0	0

**1. 13. MONTHLY PRECIPITATION IN CAPITALS OF OSTANS, 1389(continued) (mm)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	0	14.3	20.3	40.5	12.1	71.4
Ardebil .....	1.3	8	0.1	19.4	31.7	28.3
Orumiye .....	3.6	8.2	5.2	36	12	83.7
Esfahan .....	0	2.7	0.2	3.1	12.2	24
Ahvaz .....	0	6.9	8.4	13.4	85.8	13.7
Ilam .....	0.2	1.7	52.1	82.2	125.2	29.1
Bojnurd .....	14	14.6	0	19.3	42.7	27.7
Bandar Abbas .....	0	0	0	22.7	70.7	4.1
Bushehr .....	0	1.2	0	36.9	85.6	12.2
Birjand .....	0	0	0	8.2	30.6	17.3
Tabriz .....	3.7	3.7	0	2.3	10.7	48.5
Tehran .....	1.6	27	3.4	37.7	24.2	45.1
Khorramabad .....	0.2	26.3	53.6	22.9	65.8	97.7
Rasht .....	161.8	153	5.4	199.4	197.4	145.4
Zahedan .....	0	2	0	3.8	57.5	23.2
Zanjan .....	4.6	2.1	20.8	27.6	6.6	23.7
Sari .....	41.9	25.4	24.1	155.3	92.6	98.4
Semnan .....	1.5	18.8	0.3	20.8	18.4	14.6
Sanandaj .....	0.7	15.9	60.8	39.2	21.9	30
Shahr-e-Kord .....	0	12.4	10.1	28.6	51.9	71.2
Shiraz .....	0.1	0	0.2	34.7	102.3	65.2
Qazvin .....	1.3	13.7	17.8	44.3	34.7	49.4
Qom .....	0.3	11.9	0.5	29.8	4.5	14.3
Kerman .....	0	0.8	0	15.1	78.2	14.3
Kermanshah .....	0.9	30.9	24	50.5	65.2	20.4
Gorgan .....	35.5	9.2	22.8	50.5	64.2	72.8
Mashhad .....	0.5	8.6	0	13.1	41.3	22.4
Hamedan .....	0.1	36.4	32	27.8	22.3	43.9
Yasuj .....	0.8	4.9	14.9	109.2	192.2	306.7
Yazd .....	0	0	0	9.3	13.8	5.2

Source: I. R. I. Meteorological Organization.

**1. 14. HOURS OF BRIGHT SUNSHINE IN CAPITALS OF OSTANS BY MONTH, 1389 (hour)**

Capital of Ostan	Farvardin	Ordibehesht	Khordad	Tir	Mordad	Shahrivar
Arak .....	203.5	216.4	322.4	354.7	332.6	301.3
Ardebil.....	197.8	166.5	304.6	356.4	352.6	259.6
Orumiye .....	241.3	204.4	348.7	386.2	360.1	334.7
Esfahan.....	246.5	283.6	360.3	376.2	352.5	328.6
Ahvaz .....	244.9	231.8	321.3	335.2	286.8	317.9
Ilam.....	213.8	237.1	351	366.5	286.3	325.3
Bojnurd .....	171.3	210.3	358.8	367	369.4	327.9
Bandar Abbas .....	261.7	280.4	319.3	272.2	285	285.3
Bushehr .....	207.7	260.8	322.1	415.8	306.2	307.1
Birjand .....	250.1	257	375.2	363.2	371	339.9
Tabriz .....	238.7	211.3	312.8	369.2	351.5	319.6
Tehran .....	220.2	237.1	341.8	359.9	342.5	331.5
Khorramabad .....	220.8	243.4	342.2	358.8	300.7	320.9
Rasht .....	105.6	113.1	269	271.1	300.6	199.5
Zahedan .....	298.7	264.1	360.3	360.3	367.3	332.2
Zanjan .....	233.4	215.8	318	355.6	359.3	320.1
Sari .....	146	139.7	289.4	287.2	317.7	217.3
Semnan .....	227.7	268.9	359.8	358	340.2	316.5
Sanandaj .....	212.1	256.7	353	377.1	344.4	328.2
Shahr-e-Kord .....	226	273.6	341	368.3	310.3	314.2
Shiraz .....	233.8	297.8	345.9	352.6	308.2	325.5
Qazvin .....	234.1	239.1	350.4	363.3	364	333.3
Qom .....	233	249	338	351	349	314
Kerman .....	275.5	265.8	355.7	378.9	372.8	362.2
Kermanshah .....	206.8	200.4	334.4	348.1	317.1	310.8
Gorgan .....	141	146.4	305.4	291.7	328.1	269.7
Mashhad .....	176.6	220.2	367.3	377.6	376.6	329.6
Hamedan .....	227.2	263.5	354.3	370.4	332.5	314.3
Yasuj .....	217.7	260.3	316.4	335	286.6	301.7
Yazd .....	245.5	300.7	358.1	358.5	359.5	338.5

**1. 14. HOURS OF BRIGHT SUNSHINE IN CAPITALS OF OSTANS BY MONTH, 1389**

(continued)

(hour)

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	289.9	232.2	217.3	113.4	167.6	180
Ardebil.....	238	211.9	214.8	148.5	174.5	132.1
Orumiye .....	235	259.4	221.7	132.5	192.9	164.3
Esfahan.....	300.6	251.6	247	221.5	225.9	244.1
Ahvaz .....	276	269.7	235.4	198.9	175.7	195.7
Ilam.....	285.4	257.1	234.9	183.3	169.7	215.3
Bojnurd .....	278.7	222.2	230	157.9	152.5	121.3
Bandar Abbas .....	277	277.6	267.7	226.8	204.5	193
Bushehr .....	275.8	268.9	245.8	200.9	190.6	166.2
Birjand .....	296.4	275.9	272.6	225.2	208.3	215.2
Tabriz .....	244.6	255.4	211.3	132.6	179.9	164
Tehran .....	284.1	230.7	228.3	173.3	192.9	162.1
Khorramabad .....	288.9	240.7	224.5	190.2	172.9	205.8
Rasht .....	103.8	138	109	100.1	103.4	71.7
Zahedan .....	307.3	289	266	224.4	215	182
Zanjan .....	277.5	224.4	188.6	137.2	164.4	172.4
Sari .....	194	174.3	186.7	151.6	148.9	102.3
Semnan .....	281.7	238.3	241.9	194.6	204.3	184.6
Sanandaj .....	284.2	240	210	126.2	149.3	186.6
Shahr-e-Kord .....	299.6	256.4	255.4	227.7	209.5	235.4
Shiraz .....	299.4	282.8	264.6	222.5	194.4	201.4
Qazvin .....	282.4	240	231	148.5	172.2	171.5
Qom .....	283	240	238	181	217	192
Kerman .....	296	294.5	282.7	219.3	200.6	231.1
Kermanshah .....	271	240.5	216.9	141.5	130.8	181.5
Gorgan .....	211.9	192.3	193.8	160.1	160.9	113.9
Mashhad .....	285.1	233.5	236.9	183.7	145.1	116.6
Hamedan .....	287.3	237.6	229.8	121.1	172.7	186.2
Yasuj .....	292.7	263	248.2	193.3	171.4	185.2
Yazd .....	301.2	275	258	204.1	219.5	223.7

Source: I. R. I. Meteorological Organization.

**1. 15. MAXIMUM WIND SPEED IN CAPITALS OF OSTANS BY MONTH, 1389 (mps)**

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

**1. 15. MAXIMUM WIND SPEED IN CAPITALS OF OSTANS BY MONTH, 1389 (continued)**  
**(mps)**

Capital of Ostan	Mehr	Aban	Azar	Dey	Bahman	Esfand
Arak .....	9	12	12	6	12	10
Ardebil.....	17	11	15	13	18	25
Orumiye .....	11	11	8	6	13	15
Esfahan.....	9	12	7	11	12	22
Ahvaz .....	8	7	9	10	11	11
Ilam.....	15	13	18	13	8	17
Bojnurd .....	14	10	11	10	14	18
Bandar Abbas .....	9	9	7	14	12	11
Bushehr .....	11	15	14	10	14	13
Birjand .....	10	17	10	11	16	12
Tabriz .....	17	14	13	10	16	15
Tehran .....	12	8	14	10	12	10
Khorramabad .....	10	14	6	10	8	10
Rasht .....	7	6	11	10	13	8
Zahedan .....	16	16	13	20	23	21
Zanjan .....	20	8	9	8	11	18
Sari .....	15	9	9	13	7	14
Semnan .....	10	10	6	5	9	10
Sanandaj .....	9	12	8	8	9	12
Shahr-e-Kord .....	11	14	9	10	11	14
Shiraz .....	7	7	7	8	10	11
Qazvin .....	16	9	12	8	9	11
Qom .....	19	11	16	10	19	17
Kerman .....	10	8	12	14	18	13
Kermanshah .....	14	8	10	12	9	14
Gorgan .....	7	6	15	7	10	14
Mashhad .....	14	9	8	9	10	11
Hamedan .....	12	11	10	9	17	15
Yasuj .....	9	13	9	7	13	14
Yazd .....	14	14	17	10	19	17

*Source: I. R. I. Meteorological Organization.*

**1. 16. AREA AND OVERLAND FLOW COEFFICIENT OF MAIN BASINS**

Main basin	Area (1000 km <sup>2</sup> )	Coefficient of overland flow, 43-year average (1347-1389)( %)
<b>Total country</b> .....	<b>1622.6</b>	<b>22.7</b>
Caspian Sea .....	174.6	23.6
Persian Gulf and Oman Sea .....	424.5	32.1
Lake Orumiyeh .....	51.8	30.9
Central Plateau .....	824.4	10.2
Eastern Border .....	103.2	14.8
Qareh Qum .....	44.2	32.2

Source: Ministry of Energy.

**1. 17. VOLUME OF PRECIPITATION IN THE MAIN BASINS**

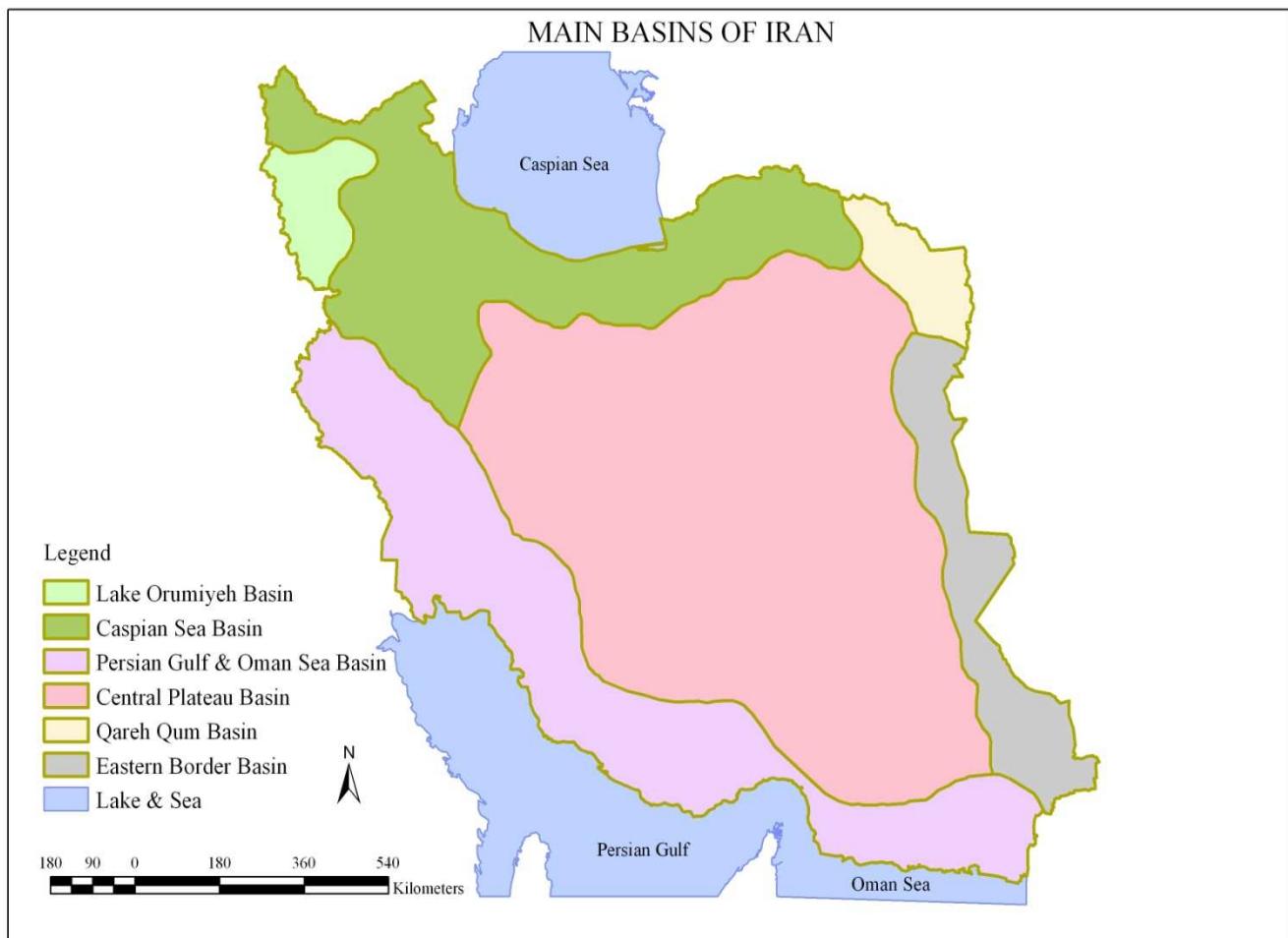
Aquatic year	Total country	Caspian Sea	Persian Gulf & Oman Sea	Lake Orumiyeh	Central Plateau	Eastern Border	Qareh Qum
43-year average (1347-1389).....	405.664	73.587	157.573	17.596	136.102	10.979	9.826
1369-70 .....	387.960	65.230	127.080	16.150	150.260	15.750	13.510
1374-75 .....	511.800	68.410	212.650	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
1385-86 .....	458.314	82.226	163.754	19.755	165.901	15.653	11.025
1386-87.....	227.973	52.985	80.709	10.048	71.886	7.091	5.255
1387-88.....	352.384	75.312	107.879	15.514	128.816	13.664	11.200
<b>1388-89.....</b>	<b>390.763</b>	<b>78.210</b>	<b>151.606</b>	<b>20.055</b>	<b>121.485</b>	<b>10.321</b>	<b>9.036</b>

Source: Ministry of Energy.

**1. 18. ESTIMATED VOLUME OF OVERLAND FLOWS OF THE MAIN BASINS**

Aquatic year	Total country	Caspian Sea	Persian Gulf & Oman Sea	Lake Orumiyeh	Central Plateau	Eastern Border & Qareh Qum
43-year average(1347-1389).....	91.99	17.38	50.56	5.44	13.82	4.79
1369-70.....	79.540	13.070	40.050	3.510	13.170	9.740
1374-75.....	109.560	19.360	59.890	4.770	22.200	3.340
1379-80.....	37.640	6.540	23.560	1.270	4.520	1.750
1384-85 .....	90.317	11.148	62.297	3.701	11.458	1.713
1385-86 .....	83.794	13.485	49.705	4.208	12.513	3.883
1386-87.....	41.595	7.172	24.695	1.680	6.291	1.757
1387-88.....	37.6	7.76	18.83	2.05	7.24	1.72
<b>1388-89.....</b>	<b>52.07</b>	<b>10.41</b>	<b>27.52</b>	<b>3.14</b>	<b>9.29</b>	<b>1.71</b>

Source: Ministry of Energy.



**1. 19. NUMBER AND AREA OF ZONES PROTECTED BY IRAN DEPARTMENT OF ENVIRONMENT AT THE END OF THE YEAR 1389** (hectare)

Ostan	Total		National park		Wildlife habitat	
	Number	Area	Number	Area	Number	Area
<b>Total country.....</b>	<b>241</b>	<b>16442991</b>	<b>25</b>	<b>1953537</b>	<b>40</b>	<b>5568887</b>
East Azarbeyejan.....	4	282615	-	-	1	96952
West Azarbeyejan.....	3	552323	1	540886	-	-
Ardebil .....	3	101749	-	-	-	-
Esfahan .....	10	974940	2	77166	4	597245
Ilam .....	6	148015	-	-	-	-
Bushehr .....	7	152477	2	67121	1	2082
Tehran .....	6	482615	3	46953	-	-
Chaharmahal & Bakhtiyari.....	7	157814	1	4372	-	-
South Khorasan .....	6	356406	-	-	2	85689
Khorasan-e-Razavi ... .....	22	781588	1	35540	2	69197
North Khorasan .....	10	194133	2	15268	1	84435
Khuzestan .....	13	676093	2	11594	1	328926
Zanjan .....	3	244610	-	-	1	29812
Semnan .....	6	2098636	2	543285	2	453387
Sistan & Baluchestan .....	9	886020	-	-	1	293031
Fars .....	11	1181276	3	256534	1	155597
Qazvin .....	1	25344	-	-	-	-
Qom .....	1	31735	-	-	-	-
Kordestan .....	5	179456	-	-	1	3292
Kerman .....	16	2467445	1	149982	4	1436679
Kermanshah .....	6	161644	-	-	1	40651
Kohgiluyeh& Boyerahmad .....	7	206030	-	-	-	-
Golestan .....	4	135825	1	87402	-	-
Gilan .....	15	131867	1	3176	5	3893
Lorestan .....	3	167184	-	-	-	-
Mazandaran .....	21	503426	2	33472	5	84981
Markazi .....	5	133910	-	-	2	27851
Hormozgan .....	16	667080	-	-	2	4378
Hamedan .....	6	57857	-	-	-	-
Yazd .....	9	2302877	1	80786	3	1770809

**1. 19. NUMBER AND AREA OF ZONES PROTECTED BY IRAN DEPARTMENT OF ENVIRONMENT AT THE END OF THE YEAR 1389 (continued)**

(hectare)

Ostan	Protected zones		National natural heritages	
	Number	Area	Number	Area
<b>Total country.....</b>	<b>144</b>	<b>8886575</b>	<b>32</b>	<b>33992</b>
East Azarbeyejan.....	2	184637	1	1026
West Azarbeyejan.....	1	11435	1	2
Ardebil .....	1	93889	2	7860
Esfahan .....	4	300529	-	-
Ilam .....	4	146495	2	1520
Bushehr .....	2	77768	2	5506
Tehran .....	3	435662	-	-
Chaharmahal & Bakhtiyari.....	5	153062	1	380
South Khorasan .....	4	270717	-	-
Khorasan-e-Razavi .. .....	16	666958	3	9893
North Khorasan .....	4	94346	3	84
Khuzestan .....	10	335573	-	-
Zanjan .....	2	214798	-	-
Semnan .....	2	1101964	-	-
Sistan & Baluchestan .....	4	592757	4	232
Fars .....	7	769145	-	-
Qazvin .....	1	25344	-	-
Qom .....	1	31735	-	-
Kordestan .....	4	176164	-	-
Kerman .....	10	880784	1	0
Kermanshah .....	3	120992	2	1
Kohgiluyeh& Boyerahmad .....	7	206030	-	-
Golestan .....	3	48423	-	-
Gilan .....	6	124797	3	1
Lorestan .....	2	167183	1	1
Mazandaran .....	11	379450	3	5523
Markazi .....	2	106055	1	4
Hormozgan .....	13	660746	1	1956
Hamedan .....	6	57857	-	-
Yazd .....	4	451280	1	2

Source: Iran Department of Environment.