

## **AGRICULTURE**

ased on the data released by the Ministry of Agriculture-Jahad, major agricultural products, including farming, horticultural, livestock, and fishery products, amounted to 123.2 million tons in 2019/20, up by 4.6 percent compared with the year before. Based on preliminary data, the value added of the agriculture, forestry, and fishing group indicated a growth rate of 9.1 percent in 2019/20 (at constant 2016/17 prices).

According to the National Drought Warning and Monitoring Center affiliated to Iran Meteorological Organization, total precipitation amounted to 516.5 billion cubic meters in the farming year 2018/19<sup>1</sup>. This was equal to 313.4 millimeters on average by area, which indicated an increase of 35.9 percent compared with the previous farming year (2017/18) and a growth rate of 33.7 percent compared with the long-term average (52 years).

**Table 2.1. Agricultural Products** 

(thousand tons)

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	-		Growth rate	Share in total (percent)		
	2018/19	2019/20	(percent)	2018/19	2019/20	
Farming products	81,213	82,731	1.9	69.0	67.2	
Horticultural products	20,530	23,459	14.3	17.4	19.0	
Livestock products	14,765	15,724	6.5	12.5	12.8	
Fishery products	1,262	1,282	1.6	1.1	1.0	
Total	117,771	123,196	4.6	100.0	100.0	

Source: Ministry of Agriculture-Jahad

**Table 2.2. Cumulative Precipitation** 

(millimeters)

			Percentage char	nge compared with	
	Farmir	ng year	The farming year	Long-term	
Water basins	2017/18▲	2018/19	2017/18	average (52 years) <sup>1</sup>	
Caspian Sea	395.4	536.2	35.6	18.7	
The Persian Gulf and the Gulf of Oman	200.6	464.2	131.4	43.5	
Lake Urmia	400.0	456.4	14.1	33.6	
The Central Plateau	91.3	200.4	119.4	34.2	
Lake Hamoon	49.3	136.7	177.2	15.0	
Kara-Kum	186.7	328.9	76.2	34.0	
Iran	230.6	313.4	35.9	33.7	

Source: Iran Meteorological Organization, National Drought Warning and Monitoring Center

<sup>&</sup>lt;sup>1</sup> Covering the period 1966-2018.

<sup>&</sup>lt;sup>1</sup> The farming year 2018/19 begins as of October 2018 and continues until September 2019.

## 2.1. Farming and Horticultural Products

Based on data released by the Ministry of Agriculture-Jahad, about 106.2 million tons of farming and horticultural products were harvested in 2019/20<sup>1</sup>, showing an increase of 4.4 percent compared with the year before. Of total farming and horticultural products, 82.7 million tons (77.9 percent) were farming products, showing an increase of 1.9 percent compared with the year before. Horticultural products amounted to 23.5 million tons, indicating a rise of 14.3 percent compared with 2018/19.

Grain production (wheat, barley, rice husks, and corn) increased by almost 11.3 percent

to 22.8 million tons in 2019/20. Production of rice husks, corn, barley, and wheat experienced increases by 42.4, 16.4, 13.3 and 3.1 percent, respectively, in 2019/20, compared with the year before.

In 2019/20, total production of agroindustrial crops<sup>2</sup> decreased by about 29.4 percent to 9.3 million tons. Sugar cane and sugar beet, with shares of 49.0 and 41.1 percent in total production of agro-industrial crops, amounted to respectively 4.6 and 3.8 million tons. Meanwhile, the production of cotton experienced the highest rise among agro-industrial crops by 38.4 percent.

Table 2.3. Cultivated Land Area and Production of Major Farming
and Horticultural Products<sup>1</sup> (thousand hectares-thousand tons)

and Horticultural Products (thousand hectares-thou						
	2018	3/19	2019	9/20	Percenta	ige change
	Cultivated land area	Production	Cultivated land area	Production	Cultivated land area	Production
Farming products						
Wheat	5,400	13,300	5,865	13,715	8.6	3.1
Barley	1,454	3,102	1,547	3,514	6.5	13.3
Rice husks	623	3,106	892	4,422	43.2	42.4
Corn	127	946	138	1,101	8.6	16.4
Cotton	71	165	90	229	27.5	38.4
Sugar cane	88	5,100	69	4,569	-21.5	-10.4
Sugar beet	119	7,394	80	3,834	-32.7	-48.1
Oilseeds	308	522	388	662	25.9	26.7
Tobacco	10	19	11	25	11.8	28.5
Pulses	867	748	842	699	-2.9	-6.5
Potatoes	148	5,143	143	5,237	-3.7	1.8
Onions	55	2,421	61	2,880	10.7	18.9
Horticultural products						
Citrus fruits	260	5,342	259	5,613	-0.5	5.1
Grapes	289	3,031	290	3,332	0.4	9.9
Apples	219	2,944	225	4,042	2.5	37.3
Pistachio	392	173	406	337	3.4	95.5
Tea	21	113	19	129	-11.8	14.2

Source: Ministry of Agriculture-Jahad

<sup>&</sup>lt;sup>1</sup> Figures related to horticultural products cover the arable cultivated land area.

<sup>&</sup>lt;sup>1</sup> The farming year 2018/19, beginning as of October 2018 and continuing until September 2019, is briefly referred to as 2019/20 in tables and figures.

<sup>&</sup>lt;sup>2</sup> Includes cotton, sugar cane, sugar beet, oilseeds, and tobacco.

Figure 2.1. Production of Major Farming **Products** (million tons) wheat barley sugar beet rice husks 15 12 9 6 3 0 2015/16 2016/17 2017/18 2018/19 2019/20

Table 2.4. Yield of Major Farming and Horticultural Products, per Unit of Cultivated Land Area (kilogram/hectare)

	(		
	2018/19	2019/20	Percentage change
Farming products			
Wheat	2,463	2,339	-5.0
Barley	2,134	2,271	6.4
Rice husks	4,986	4,957	-0.6
Corn	7,451	7,986	7.2
Cotton	2,335	2,535	8.6
Sugar cane	57,768	65,902	14.1
Sugar beet	62,153	47,875	-23.0
Oilseeds	1,695	1,705	0.6
Tobacco	2,030	2,332	14.9
Pulses	863	831	-3.7
Potatoes	34,646	36,649	5.8
Onions	44,259	47,562	7.5
<b>Horticultural products</b>			
Citrus fruits	20,510	21,659	5.6
Grapes	10,485	11,477	9.5
Apples	13,426	17,989	34.0
Pistachio	440	832	89.1
Tea	5,368	6,951	29.5

Source: Ministry of Agriculture-Jahad

## 2.2. Livestock and Fishery Products

According to the Ministry of Agriculture-Jahad, livestock products, including red meat, milk, poultry, eggs, and honey, amounted to 15.7 million tons in 2019/20, showing a rise of 6.5 percent compared with the year before.

**Table 2.5. Livestock Products** (thousand tons)

	2018/19	2019/20	Percentage change
Red meat	830	859	3.6
Milk	10,589	11,002	3.9
Poultry	2,355	2,733	16.1
Eggs	901	1,017	12.8
Honey	90	113	24.3
Total	14,765	15,724	6.5

Source: Ministry of Agriculture-Jahad

In 2019/20, fishery products grew by 1.6 percent and totaled 1,282 thousand tons, with 56.2 percent of fishery products being related to the Persian Gulf, 2.8 percent to the Caspian Sea, and 41.1 percent to the aquaculture centers. The weight and value of fishery exports were 146 thousand tons and \$539 million, respectively, up by 2.0 percent compared with the year before.

**Table 2.6. Fishery Products and Exports** 

	2018/19	2019/20	Percentage change
Production (thousand tons)	1,262	1,282	1.6
Persian Gulf	731	720	-1.5
Caspian Sea	42	36	-15.5
Aquaculture centers	489	527	7.7
Exports			
Value (million dollars)	528	539	2.0
Weight (thousand tons)	143	146	2.0

Source: Ministry of Agriculture-Jahad, Iran Fisheries Organization

# 2.3. Guaranteed Purchase of Major Agricultural Products

Setting the guaranteed purchase price on agricultural products, aimed at encouraging farmers to produce basic agricultural goods,

<sup>&</sup>lt;sup>1</sup> Ratio of production (unrounded figures) to the arable cultivated land area.

## **Chapter 2** AGRICULTURE

establishing a balanced production system, and maintaining the farmers' income level, has been an important government policy of recent years. In the farming year 2018/19, the guaranteed purchase price of farming products increased within a range of 13.0 to 33.1 percent compared with the year before. The guaranteed purchase price of wheat increased by 30.8 percent compared with 2018/19, with durum wheat experiencing the highest increase in the guaranteed purchase price by 33.1 percent.

Table 2.7. Guaranteed Purchase Price of Major Agricultural Products (rial/kilogram)

	2018/19	2019/20	Percentage change
Wheat	13,000	17,000	30.8
Barley	10,300	11,639	13.0
Rice (Khazar varie	ty) 38,368	45,274	18.0
Sugar beet	3,122	3,746	20.0

Source: Cabinet approvals

#### 2.4. Subsidies

Subsidy paid on goods and services (subject to Budgetary Measure No. 520000)

reached Rls. 24.0 trillion in 2019/20. Out of this amount, a sum of Rls. 23.5 trillion was paid on agricultural goods, services, and activities, constituting 97.9 percent of total subsidy payment out of the mentioned Budgetary Measure.

#### 2.5. Government Investment

According to data released by the Ministry of Economic Affairs and Finance, government credits paid on the acquisition of non-financial assets for the development of "agriculture and natural resources" and "water resources" projects decreased by 95.4 percent to Rls. 4.0 trillion in 2019/20, constituting 24.8 percent of the approved figure at Rls. 16.2 trillion. The credits paid on the acquisition of non-financial assets of the "agriculture and natural resources" project reached Rls. 3.6 trillion, down by 89.7 percent. The highest share of these credits by 53.8 percent was related to "farming and horticulture" group. For the development of water resources, the mentioned credits amounted to Rls. 0.4 trillion, down by 99.3 percent.

Table 2.8. Subsidy Payments under Budgetary Measure No. 520000 in 2019/20 (billion rials)

	Value	Share in total (percent)
Agricultural inputs, factors of production, guaranteed purchase of agricultural products, and market regulation of agricultural products	3,308	13.8
Guaranteed purchase of wheat	18,000	74.9
Organizing the production and guaranteed purchase of tea	1,364	5.7
Assistance for the compensation of Iran Water Resources Management Company (Holding)	849	3.5
Total subsidy payment to the agriculture sector	23,521	97.9
Subsidy payment to other sectors	500	2.1
Total subsidy paid under Budgetary Measure No. 520000	24,021	100.0

Source: Ministry of Economic Affairs and Finance

Table 2.9. Credits Paid on Acquisition of Non-financial Assets for Development of "Agriculture and Natural Resources" and "Water Resources" Projects (billion rials)

	Performance figure			Share (percent)		20	19/20
	2018/19	2019/20	Percentage change	2018/19	2019/20	Approved figure	Realization <sup>1</sup> (percent)
Agriculture and natural resources	35,222.5	3,632.0	-89.7	40.8	90.7	12,674.6	28.7
Water resources	51,061.4	370.6	-99.3	59.2	9.3	3,490.0	10.6
Total	86,283.8	4,002.6	-95.4	100.0	100.0	16,164.6	24.8

Source: Ministry of Economic Affairs and Finance, Treasury General

## 2.6. Banking Facilities

Outstanding facilities (net) extended by banks and non-bank credit institutions to public and non-public sectors active in the field of agriculture grew by 21.3 percent to Rls. 1,104.0 trillion in March 2020. The share of the non-public agriculture sector in the outstanding facilities (net) was 99.4 percent. By March 2020, the outstanding facilities (net) extended by Bank Keshavarzi (Agriculture Bank of Iran) to the non-public agriculture sector rose by 21.8 percent to Rls. 711.2 trillion. The share of Bank Keshavarzi in the outstanding facilities (net) extended to the public and non-public agriculture sectors was 64.4 percent, showing a growth rate of about 0.3 percentage point compared with March 2019. Furthermore, bank Keshavarzi paid Rls. 530.6 trillion through non-statutory and statutory facilities, administered funds, and contracts in 2019/20,

up by 10.6 percent compared with the year before. Out of credits paid by this bank, 80.8 percent (Rls. 428.5 trillion) were in the form of non-statutory resources, while 19.2 percent (equal to Rls. 102.1 trillion) were in the form of statutory facilities, administered funds, and contracts. The composition of facilities extended by Bank Keshavarzi according to Islamic contracts indicates the high share of partnership contracts by 48.2 percent. A sum of Rls. 255.8 trillion was paid in the form of partnership contracts, indicating a decline of 0.1 percent compared with the year before. The composition of facilities extended by this bank by use indicates that "agricultural industries and services" activity, enjoying the highest share in total by 39.7 percent, increased by 7.1 percent compared with the year before, to reach Rls. 210.7 trillion.

Table 2.10. Outstanding Facilities<sup>1</sup> (Net) Extended by Banks and Non-bank Credit
Institutions to Public and Non-public Sectors Active in Agriculture (trillion rials)

	Ma	March		Share (percent)	
	2019	2020	_ Percentage change	March 2019	March 2020
Non-public sector	896.8	1,097.7	22.4	98.5	99.4
Bank Keshavarzi	584.0	711.2	21.8	64.2	64.4
Other banks and credit institutions	312.7	386.4	23.6	34.4	35.0
Public sector	13.6	6.3	-53.6	1.5	0.6
Total	910.4	1,104.0	21.3	100.0	100.0

Outstanding facilities (net) are calculated upon the deduction of the outstanding debt of customers and extended facilities under the exchange rate differential, future profits, future profits and commissions, receipts from Mudarabah, partnership contracts (with the bank as partner), and outstanding profits and commissions headings. Outstanding facilities include legal partnership and direct investment contracts.

<sup>&</sup>lt;sup>1</sup> By realization, a dividing of the performance figure by the approved figure multiplied by 100 is meant.

Figure 2.2. Outstanding Facilities (Net) Extended by Banks to Non-public Agriculture Sector

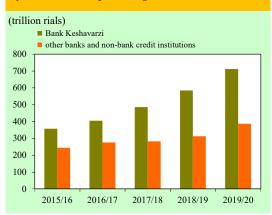


Figure 2.3. Facilities Extended by Bank Keshavarzi

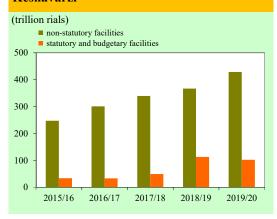


 Table 2.11. Facilities Extended by Bank Keshavarzi by Term of Repayment
 (trillion rials)

			Percentage	Share (percent)		
	2018/19	2019/20	change	2018/19	2019/20	
Short-term	347.5	348.5	0.3	72.5	65.7	
Medium-term	118.1	162.7	37.8	24.6	30.7	
Long-term	14.0	19.4	39.2	2.9	3.7	
Total	479.5	530.6	10.6	100.0	100.0	

Source: Bank Keshavarzi

### 2.7. Agricultural Insurance Fund

In the farming year 2018/19, about Rls. 11.0 trillion was paid to farmers by the Agricultural Insurance Fund as compensation, showing a decrease of 16.0 percent compared with the previous farming year. As this Fund is a loss-making institution, a large proportion of its commitments on compensations are constantly being financed out of government subsidies. It is to be noted that the share of government subsidies in the total paid compensation fell from 66.8 percent in the farming year 2017/18 to 45.8 percent in the farming year 2018/19, while 54.2 percent was financed out of the farmers' premium payments. Due to the government's

failure to fulfill its commitments in due time, Bank Keshavarzi has continually been the body in charge of financing the deficit of the Agricultural Insurance Fund over the past years. According to the report released by the Agricultural Insurance Fund, in the farming year 2018/19, this Fund insured 3.5 million hectares of lands under the cultivation of 148 farming and horticultural against losses products from natural disasters. The cultivated land area covered by the insurance scheme shows a decrease of 11.7 percent compared with the year before. Meanwhile, a sum of Rls. 9.6 trillion was paid by the Fund as compensation on farming and horticultural products 2019/20, down by 16.2 percent.

Table 2.12. Performance of Agricultural Insurance Fund

		Insured area			Compensation paid (billion rials)		
	2018/19	2019/20	Percentage change	2018/19	2019/20	Percentage change	
Farming (thousand hectares)	3,166	2,645	-16.5	3,389	2,904	-14.3	
Horticulture (thousand hectares) <sup>1</sup>	749	814	8.7	8,082	6,711	-17.0	
Livestock (thousand)	7,487	8,113	8.4	798	803	0.6	
Poultry (million)	906	1,059	16.9	754	333	-55.8	
Aquaculture centers (thousand hectares)	4	5	20.5	50	248	394.7	
Natural resources (thousand hectares)	1,720	1,557	-9.4	17	2	-88.4	
Total <sup>2</sup>	θ	θ	θ	13,090	11,000	-16.0	

Source: Agricultural Insurance Fund. <sup>1</sup> Includes "tree trunk" subgroup. <sup>2</sup> Total insured area may not be calculated due to different units of measurement.

Table 2.13. Insured Farming and Horticultural Lands and Amount of Compensation

	Area of insured land (thousand hectares)		Percentage	Share	1	Compensation paid (billion rials)		Share
	2018/19	2019/20	<ul> <li>change</li> </ul>	(percent)	2018/19	2019/20	- change	(percent)
Wheat	2,752	2,229	-19.0	64.4	2,600	2,148	-17.4	22.3
Rice	63	80	26.3	2.3	360	316	-12.3	3.3
Barley	190	167	-12.1	4.8	228	147	-35.5	1.5
Sugar beet	27	25	-8.1	0.7	20	39	92.6	0.4
Colza	56	52	-7.4	1.5	74	85	14.9	0.9
Pistachio	212	232	9.8	6.7	3,029	1,920	-36.6	20.0
Other	615	674	9.6	19.5	5,160	4,959	-3.9	51.6
Total	3,915	3,459	-11.7	100.0	11,471	9,615	-16.2	100.0

Source: Agricultural Insurance Fund

## 2.8. Performance of Rural, Women, and Agricultural Cooperatives and Unions

According to the Central Organization for Rural Cooperatives, the number of active rural, women, and agricultural cooperatives reached 6,521 in March 2020. These cooperatives covered 5.9 million rural dwellers, indicating an increase of 1.1 percent in terms of the number of cooperatives and a rise of 1.4 percent in terms of the members. By March 2020, the number of rural, women, and agricultural unions reached 497, showing an increase of 0.8 percent compared with March 2019. Meanwhile, the number of companies as member to these unions rose by 6.0 percent to 5,333 in March 2020. It is important to note that rural cooperatives purchased about 4.9 million tons of various agricultural products at agreed prices in March 2020, up by 49.6 percent compared with March 2019.

Table 2.14. Rural, Women, and Agricultural Cooperatives and Unions

	Ma	rch	Percentage change	
_	2019	2020		
Cooperatives				
Number	6,451	6,521	1.1	
Members (thousand persons)	5,805	5,887	1.4	
Capital (billion rials)	5,689	6,067	6.7	
Unions				
Number	493	497	0.8	
Member companies	5,033	5,333	6.0	
Capital (billion rials)	1,336	1,535	14.9	

Source: Central Organization for Rural Cooperatives

## 2.9. Exports of Agricultural Products

Based on data released by the Ministry of Agriculture-Jahad, 7.1 million tons of various agricultural products worth \$5.9 billion were exported in 2019/20, indicating a rise of 3.0 percent in terms of weight and a fall of 8.3 percent in terms of value. Exports of agricultural products accounted for 5.3 percent of the weight and 14.3 percent of the value of non-oil exports through Customs<sup>1</sup>. In 2019/20, "farming products" accounted for 62.2 percent of total agricultural exports in terms of weight. "Horticultural products", despite a lower share of 27.6 percent in the weight of agricultural exports, accounted for 46.9 percent of the total value of agricultural exports.

## 2.10. Imports of Agricultural Products

According to the Ministry of Agriculture-Jahad, approximately 25.1 million tons of various agricultural products valued at \$12.8 billion were imported in 2019/20, showing increases by 22.5 and 19.0 percent in terms of weight and value, respectively. Imports of agricultural products accounted for 28.9 percent of the value and 70.0 percent of the weight of imported products. Meanwhile, the average value of each ton of imported agricultural products was \$508, indicating a decrease of 2.9 percent compared with the year before. Imports of wheat amounted to 548.6 thousand tons in 2019/20, indicating a remarkable increase compared with the year before.

**Table 2.15. Exports of Agricultural Products** 

(million dollars-thousand tons)

	2018/19		2019/20		Percentage change	
	Value	Weight	Value	Weight	Value	Weight
Livestock and poultry 1	1,093	631	728	590	-33.4	-6.5
Fish and fishery products	333	121	250	127	-25.1	4.5
Farming products	2,630	4,659	2,102	4,444	-20.1	-4.6
Horticultural products	2,278	1,503	2,749	1,970	20.7	31.1
Forest products and grassland	58	27	31	19	-46.0	-28.6
Total agricultural exports	6,392	6,941	5,859	7,150	-8.3	3.0
Share of agricultural exports in total non-oil exports (percent) <sup>2</sup>	14.3	5.9	14.3	5.3	0.0	-0.5

Source: Ministry of Agriculture-Jahad

**Table 2.16. Imports of Agricultural Products** 

(million dollars-thousand tons)

	20	2018/19		2019/20		Percentage change	
	Value	Weight	Value	Weight	Value	Weight	
Livestock and poultry <sup>1</sup>	1,310	266	1,485	315	13.4	18.3	
Fish and fishery products	59	24	72	27	22.4	12.0	
Farming products	8,020	19,041	9,707	23,424	21.0	23.0	
Horticultural products	1,292	1,122	1,431	1,285	10.8	14.5	
Forest products and grassland	36	25	55	35	54.4	37.6	
Total agricultural imports	10,717	20,479	12,750	25,086	19.0	22.5	
Share of agricultural imports in total imports (percent) <sup>2</sup>	24.8	63.3	28.9	70.0	4.1	6.7	

Source: Ministry of Agriculture-Jahad

<sup>&</sup>lt;sup>1</sup> Includes the exports of veterinary pharmaceuticals.

<sup>&</sup>lt;sup>2</sup> Non-oil exports through Customs include natural gas condensate. Percentage change is in percentage points.

<sup>&</sup>lt;sup>1</sup> Includes the imports of veterinary pharmaceuticals.

<sup>&</sup>lt;sup>2</sup> Percentage change is in percentage points.

The weight and value of exports through Customs in 2018/19 and 2019/20 are calculated with the inclusion of natural gas condensate.

The mentioned sharp rise in the imports of wheat was in compliance with the Approval by the Supreme National Security Council, specifying both the maintenance of and the increase *in* the inventory levels of commodities with strategic importance. This was specifically done with the aim of offsetting the adverse effects of economic sanctions.

A review of the developments of foreign trade shows that the trade deficit of the agriculture sector increased by 59.3 percent to \$6.9 billion in 2019/20. The increase in the trade deficit of the agriculture sector was the result of the fall in the export value of saffron and dates as against the increase in the imports of basic agricultural goods such as corn, rice, oils, barley, and meals. Meanwhile, the average per-ton value of exported agricultural products fell by 11.0 percent to \$820 in 2019/20. Considering the composition of agricultural imports and exports, the terms of trade of the agriculture sector decreased by 8.4 percent from 1.76 in 2018/19 to 1.61 in 2019/20.

**Table 2.17. Trade Balance of Agricultural Products** 

(million dollars)

	2018/19	2019/20	Percentage change
Imports	10,717	12,750	19.0
Exports	6,392	5,859	-8.3
Trade deficit	4,325	6,891	59.3

Source: Ministry of Agriculture-Jahad

Table 2.18. Terms of Trade for Agriculture Sector

(dollar/ton)

	2018/19	2019/20	Percentage change
Value of exports per ton	921	820	-11.0
Value of imports per ton	523	508	-2.9
Terms of trade	1.76	1.61	-8.4