# **A Selection of Labor Force Survey Results**

Spring 1397<sup>1</sup> (21 March – 21 June 2018)

Iranian seasons and their equivalent in Gregorian calendar

Spring (21 March-21June) Summer (22 June -22 September) Autumn (23 September -21 December) Winter(22 December -20 March)

<sup>&</sup>lt;sup>1</sup>. It is the Iranian year which usually begins on the day of 21 March of the Gregorian calendar. To find the corresponding year of the Gregorian calendar, add 621 or 622 (depending on the time of the year) to a <u>solar Hijri</u> year. For example the corresponding year of the year 1397 in the Gregorian calendar is (21 March 2018-20 March 2019).

## Introduction

The pair concepts of employment and unemployment are so basic to national economies that any rise in employment rate - which means a drop in unemployment - is reckoned as an indicator to the national development. Moreover, the unemployment rate is an indicator for appraising the economic conditions of the country. The information on the nation's market would be collected through the Household Employment and Unemployment Characteristics Survey (HEUCS) as of the year 1997. However, in order to improve the HEUCS quality and its conformance with the international concepts, particularly, with those of the ILO, the survey plan was revised in order that the current plan namely "Labor Force Survey" could be implemented. The "Labor Force Survey" was first conducted in the year 1384 and since then has regularly been taken in the middle month of every season.

The "Labor Force Survey" is conducted in order to obtain information on the composition and current condition of labour force and its changes. This objective is accomplished by "estimation of seasonal and annual labour force indicators at national and provincial levels", "estimation of annual number of population in labour force at national and provincial levels", "estimation of seasonal and annual changes of labour force at national and provincial levels", and "estimation of annual changes of labour force at national and provincial levels", and "estimation of annual changes of labour force at provincial levels".

The population covered in this survey includes the people who, according to the definition, are members of private or collective settled households in rural or urban areas, so the members of private unsettled households and institutional households are not included in this survey. The method used for conducting this survey is a two-step classified clustering method. In this survey, in addition to estimation of current levels, the estimate of changes is made; therefore, the rotation sampling is used. The rotation sampling can provide estimate of current levels and changes in the best manner by fixing some sample units between two quarters of the survey and changing the remaining units. With respect to the aim of the survey, the selected rotation pattern for this survey is a "2-2-2" pattern which means that during the Master Sample period, each sample household is enumerated four times; accordingly, that sample household is in the sample for two successive quarters and then is excluded from the sample temporarily for two successive quarters and again is included in the sample for the two next successive quarters. This household is then excluded from the sample until the end of the years related to the master sample period. It should be noted that for optimal conduct of rotation sampling, the master sample is needed. The master sample refers to the sample that can be used for selection of sub-samples to satisfy the needs of several surveys or several rounds of a survey. The sampling frame of the first step (from the spring of the year 1397) is the fourth master sample of the household surveys. The master sample includes the sampling units (clusters) of the first step. Each cluster includes one block/village, part of a large block/village or in some cases a combination of some small blocks/villages which were created from the 2016 National Population and Housing Census. With respect to changes in population and housing units in urban areas and in order to prepare an appropriate and updated frame in urban areas, some households were listed within the master sample clusters in the winter of the year 1396, but due to minor changes in population and housing units in rural areas, no listing was made in rural areas (unless in exceptional cases).

It should be cited that since the spring of the year 1397, the confidence interval for the unemployment rate has been 95 percent in the release of the Survey results. In view of the statistical methodology, the confidence interval means that if several samples are selected from the target population by using the same sampling method, and based on each of the samples, a confidence interval is calculated for the real amount of unemployment rate. It is expected that 95% of these confidence intervals include the real unemployment rate.

# Findings

Table 1 provides the major indicators of labour market and its changes in the spring of the year 1397 compared to the spring of the year 1396. Table 2 also provides major labour force indicators by province.

Figure No.1 shows the major indicators of labour market in the spring of the year 1397.



# Major Indicators of Labour Market- Spring 1397 (Thousand people)

A review of the economic participation rate for the population aged 10 and over (activity rate) reveals that 41.1 % of the population of the working age (10 years or over) are economically active; i.e., they lie either in the employed or the unemployed group. In addition, the results indicate that the economic participation rate stands lower for women compared to men and urban areas in contrast to rural areas. The review of the changes in economic participation rate of the total country shows that this indicator increased by 0.7% compared with the last corresponding season (spring, the year 1396). The review of employment rate of population aged 10 and over shows that 36.1 percent of working aged population (10 years and over) were employed. This indicator stands higher for men and rural areas compared to women and urban areas.

Table 1.	Major labor force indicators by sex,	urban and rural	areas; spring,	the year	1397
compared	l to the spring, the year 1396				

Labor Force Indicators*		Total country			Male			Female		
		Spring, the year 1397	**Spring, the year 1396	Changes	Spring, the year 1397	**Spring, the year 1396	Changes	Spring, the year 1397	**Spring, the year 1396	Changes
Population aged 10 and over	Number	66582984	65840246	742738	33393597	33031230	362367	33189387	32809015	380372
Economic	Rate	41.1	40.4	0.7	65.3	64.4	0.9	16.8	16.2	0.6
participation rate of population aged 10 and over	Number	27382928	26590856	792072	21817067	21286813	530254	5565861	5304043	261818
Employment of	Rate	36.1	35.4	0.7	58.6	57.7	0.9	13.5	12.9	0.6
population aged 10 and over	Number	24061451	23274835	786616	19566176	19055333	510843	4495274	4219502	275772
Unemployment of	Rate	12.1	12.5	-0.4	10.3	10.5	-0.2	19.2	20.4	-1.2
population aged 10 and over	Number	3321476	3316021	5455	2250890	2231479	19411	1070586	1084541	-13955
Unemployment of	Rate	12.1	12.5	-0.4	10.3	10.5	-0.2	19.3	20.5	-1.2
population aged 15 and over	Number	3316119	3312090	4029	2245664	2228335	17329	1070455	1083755	-13300
Unemployment	Rate	28.3	28.6	-0.3	24.7	24.3	0.4	41.4	43.5	-2.1
of the youths aged 15-24	Number	832624	864773	-32149	570583	574709	-4126	262041	290064	-28023
Unemployment	Rate	25.5	26.1	-0.6	21.1	21.1	0.0	39.8	43.6	-3.8
of the youths aged 15-29	Number	1800494	1854361	-53867	1144078	1159250	-15172	656416	695111	-38695
Unemployment of	Rate	17.8	20.4	-2.6	12.1	13.5	-1.4	28.6	32.8	-4.2
higher education graduates aged 10 and over	Number	1209963	1217721	-7758	534801	522915	11886	675160	694803	-19643
Employment in	Share	18.7	18.6	0.1	17.9	17.5	0.4	21.9	23.7	-1.8
agriculture sector	Number	4490452	4329791	160661	3506186	3328903	177283	984265	1000887	-16622
Employment in	Share	31.2	31.8	-0.6	32.5	33.1	-0.6	25.7	25.7	0,0
manufacturing sector	Number	7515501	7398612	116889	6361132	6314213	46919	1154369	1084399	69970
Employment in	Share	50.1	49.6	0.5	49.5	49.4	0.1	52.4	50.5	1.9
services sector	Number	1205081 9	1153739 8	513421	9694588	9406931	287657	2356231	2130466	225765
Underemployment	Share	10.2	10.2	0.0	11.2	11.4	-0.2	5.7	5.0	0.7
	Number	2457383	2381786	75597	2199368	2170309	29059	258014	211477	46537
The share of the unemployed higher education graduates aged 10 and over out of the total unemployed population		36.4	36.7	-0.3	23.8	23.4	0.4	63.1	64.1	-1.0
The share of the employed higher education graduates aged 10 and over out of the total employed population		23.2	20.5	2.7	19.9	17.5	2.4	37.5	33.7	3.8

\* Difference is due to rounding.

**\*\*.** Figures are updated according to the population projections based on the results of the 2016 Population and Housing Census

			Urban areas		Rural areas		
Labor force inc	licator*	Spring, the year 1397	**Spring, the year 1396	Changes	**Spring, the year 1397	Spring, the year 1396	Changes
Population aged 10 and over	Number	50160056	49335414	824642	16422927	16504832	-81905
Economic	Rate	40.2	39.7	0.5	43.9	42.5	1.4
participation rate of population aged 10 and over	Number	20171644	19579276	592368	7211283	7011580	199703
Employment rate	Rate	34.7	34.0	0.7	40.4	39.2	1.2
of population aged 10 and over	Number	17418785	1698373	620412	6642666	6476461	166205
Unemployment of	Rate	13.6	14.2	-0.6	7.9	7.6	0.3
population aged 10 and over	Number	2752859	2780902	-28043	568617	535118	33499
Unemployment of	Rate	13.6	14.2	-0.6	7.9	7.7	0.2
population aged 15 and over	Number	2749839	2778072	-28233	566280	534018	32262
Unemployment	Rate	32.7	32.2	0.5	18.5	20.4	-1.9
of population aged 15-24	Number	665427	672251	-6824	167196	192522	-25326
Unemployment	Rate	29.0	29.2	-0.2	16.2	17.6	-1.4
of population aged 15-29	Number	1487175	1531509	-44334	313319	322852	-9533
Unemployment of	Rate	17.4	20.0	-2.6	22.2	24.7	-2.5
higher education graduates aged 10 and over	Number	1076153	1091100	-14947	133807	126621	7186
Employment in	Share	6.1	5.6	0.5	51.5	52.2	-0.7
agriculture sector	Number	1069619	946512	123107	3420832	3383278	37554
Employment in	Share	33.7	34.6	-0.9	24.7	24.4	0.3
manufacturing sector	Number	5875287	5817597	57690	1640214	1581015	59199
Employment in	Share	60.1	59.7	0.4	23.8	23.3	0.5
services sector	Number	10469267	10026988	442279	1581552	1510409	71143
Underemployment	Share	9.2	9.3	-0.1	13.0	12.6	0.4
	Number	1594055	1567835	26220	863328	813951	49377
The share of the unemployed higher education graduates aged 10 and over out of the total unemployed population		39. 1	39 .2	-0.1	23 .5	23 .7	-0.2
The share of the employed higher education graduates aged 10 and over out of the total employed population		29.4	26.0	3.4	7 .1	6 .0	1 .1

Table 1. Major labor force indicators by sex, urban and rural areas; spring, the year 1397 comparedto the spring, the year 1396 (continued)

\* Difference is due to rounding.

**\*\*.** Figures are updated according to the population projections based on the results of the 2016 Population and Housing Census

A review of employment in major economic sectors indicates that the services sector holds the biggest share of employment with 50.1% of the total, followed by manufacturing sector with31.2% and agriculture sector with 18.7%. The contribution of the employed in the agriculture sector in spring of the year 1397 rose by 0.1 percent in comparison with the last corresponding season (spring 1396) but the contribution of the employed in the manufacturing sector experienced a 0.6 percent fall and the contribution of the employed in the service sector had a 0.5 percent rise.

Review of the unemployment rate among the population aged 10 and over shows that 12.1 percent of the economically active population were unemployed. Moreover, based on the confidence interval of 95%, the unemployment rate of the total country was between 11.7 and 12.6 percent with a 12.1 percent centre point. This means that with the confidence interval of 95 percent, this interval shows the real unemployment rate of the country Based on the results, the unemployment rate was higher for women and urban areas than men and rural areas. A review of the changes happened in the indicator at national level shows that this indicator decreased by 0.4% compared to the last corresponding season (spring, the year 1396).

The unemployment rate among the population aged 15 and over mentions that 12.1 percent of the economically active population were unemployed. Based on the results, the unemployment rate was higher for women and urban areas than men and rural areas. A review of the changes happened in the indicator at national level shows that this indicator decreased by 0.4% compared to the last corresponding season (spring, the year 1396).

The unemployment rate among the youths aged 15-24 stood at 28.3% while standing higher for women and urban areas than for men and rural areas. A review of the changes in unemployment rate shows that the indicator has decreased by 0.3% compared to the last corresponding season (spring, the year 1396).

The unemployment rate among the youths aged 15-29 indicates that 25.5% of the active population were unemployed. This indicator stands higher for women and urban areas than men and rural areas. A review of the changes shows that this indicator dropped by 0.6% compared to the last corresponding season (spring, the year 1396).

Review of the unemployment rate among the higher education graduates aged 10 and over shows that 17.8 percent of the active population among the higher education graduates were unemployed. This indicator stands higher for women and rural areas than men and urban areas. A review of the changes shows that this indicator has fallen by 2.6% compared to the last corresponding season (spring, the year 1396).

The underemployment share tells that 10.2% of the total employed population were underemployed. The indicator stands higher for men and rural areas than for women and urban areas. This indicator experienced no change compared to the last corresponding season (spring, the year 1396).

A review of the contribution of the employed population aged 10 or over with usual working hours of 49 and over shows that 40.1% of them work usually more than 49 hours a week. As a decent work indicator, it reveals that a great share of the employed population of the country works more

than the standard hours. This indicator experienced a 1 percent fall compared to the last corresponding season (spring, the year 1396).

In the spring 1397, the share of unemployed higher education graduates out of the total unemployed population was 36.4 percent. The indicator stands higher for women and urban areas than for men and rural areas. A review of the changes shows that this indicator experienced a 0.3 percent decrease compared to the last corresponding season (spring, the year 1396).

In the spring 1397, the share of employed higher education graduates out of the total employed people was 23.2 percent. The indicator stands higher for women and urban areas than for men and rural areas. A review of the changes shows that this indicator increased by 2.7 percent compared to the last corresponding season (spring, the year 1396).

The figure No.2 shows the changes of unemployment rate in the successive seasons during the years 1393 to 1397.



Table 2 shows some major labour force indicators in spring, the year 1397 in comparison to spring, the year  $1396^*$  by province.

			Employment ratio		Unemployment rate		
	Economic participation rate				Spring 1	~ .	
Province	Spring 1397	Spring 1396	Spring 1397	Spring 1396	Point to point estimation	Confidence interval 95%	Spring 1396
Total country	41.1	40.4	36.1	35.4	12.1	(11.7-12.6)	12.5
East Azarbayejan	40.7	43.2	36.7	38.8	9.9	(8.1-11.7)	10.2
West Azarbayejan	42.1	41.9	35.9	37.2	14.9	(13.0-16.8)	11.0
Ardebil	45.7	45.0	42.2	39.0	7.7	(6.0-9.4)	13.3
Esfahan	41.9	41.1	36.3	34.6	13.3	(11.5-15.1)	15.8
Alborz	39.6	38.5	33.4	30.7	15.6	(13.9-17.3)	20.2
Ilam	37.5	36.4	33.0	31.2	11.9	(9.6-14.2)	14.2
Bushehr	40.5	35.8	36.1	31.9	10.9	(9.0-12.7)	10.8
Tehran	40.1	40.9	35.2	36.3	12.3	(10.7-13.9)	11.2
Chaharmahal & Bakhtiyari	44.0	39.2	34.0	31.4	22.8	(19.9-25.6)	20.1
South Khorasan	41.1	42.2	37.7	37.4	8.5	(7.0-9.9)	11.2
Khorasan-e-Razavi	43.5	45.2	38.9	38.8	10.7	(9.1-12.2)	14.1
North Khorasan	46.0	42.9	42.0	38.2	8.8	(7.2-10.4)	11.0
Khuzestan	39.3	38.7	33.2	32.9	15.5	(13.7-17.3)	15.0
Zanjan	43.8	40.4	40.2	35.9	8.2	(6.5-9.9)	11.1
Semnan	38.7	41.4	35.9	37.9	7.1	(5.3-8.9)	8.5
Sistan & Baluchestan	38.1	30.7	31.0	27.0	18.6	(16.0-21.3)	12.0
Fars	41.0	40.3	36.9	36.4	9.9	(8.4-11.4)	9.5
Qazvin	41.7	38.6	37.0	34.5	11.2	(9.5-13.0)	10.8
Qom	35.8	35.4	32.2	31.6	10.1	(8.5-11.6)	10.9
Kordestan	42.5	41.0	37.0	35.3	13.0	(11.1-14.9)	13.7
Kerman	37.9	37.9	33.7	32.5	11.2	(9.3-13.2)	14.2
Kermanshah	44.0	42.3	35.5	33.8	19.4	(15.8-22.9)	19.9
Kohgiluyeh & Boyerahmad	38.3	36.4	33.6	32.1	12.3	(10.2-14.4)	11.9
Golestan	40.7	39.2	37.1	34.0	8.8	(7.2-10.5)	13.4
Gilan	46.8	44.6	42.1	40,0	10.0	(8.0-12.0)	10.5
Lorestan	36.6	34.1	30.8	30.2	15.9	(13.4-18.3)	11.6
Mazandaran	43.7	42.1	39.8	38.0	8.8	(7.4-10.2)	9.8
Markazi	34.5	33.7	31.4	31.3	8.8	(7.1-10.5)	7.1
Hormozgan	43.3	37.8	38.3	34.3	11.5	(9.2-13.8)	9.2
Hamedan	42.8	40.4	39.3	36.8	8.2	(6.6-9.8)	8.9
Yazd	42.1	42.9	35.6	37.3	15.4	(12.8-18.1)	13.1

 $^{*}$  The figures were updated according to the population projections based on the results of the 2016 National Population and Housing Census

# **Definitions and concepts**

The Statistical Centre of Iran employs the new international definitions and concepts based on the ICLS 1983<sup>1</sup> for measuring the employment and unemployment in the Labour Force Survey.

**Work:** This term is used to determine the status of economic activity for people. The term "work" refers to the group of economic activities (mentally or physically) which are done for earning salary (in cash or in kind) and their ultimate goals are to produce goods or services. Generally, the people who work are divided into two groups: self-employed, who work for themselves, and wage and salary earners, who earn money for the work they do.

**Statistical period (Reference week):** Refers to the second or third calendar week (Saturday to Friday) of the middle month of each season.

## Employed

All people aged 10 or over who according to the definition of work, have worked for at least one hour during the reference week or have temporarily left their job for one reason or another, are reckoned as employed. Persons who, without receiving any remuneration, work for a member of their household that is a relative (unpaid family workers).; trainees who perform an activity in relation to the activity of the institute for apprenticeships during the training period, namely, they directly contribute to the production of goods or services, their activity is considered "work"; Students who have worked during the reference week, according to the definition of work; and all people who are serving as permanent and temporary cadre in the armed forces (armed forces, cadre personnel, soldiers, commissioned officers, non-commissioned officers of the military forces and the police) are considered employed.

## Unemployed

The unemployed are all people aged 10 or over who have the following three criteria together:

- 1. have no job during the reference week (not engaged in a wage/salary job or self-employment,)
- 2. are available to work during the reference week or the following week (available for a wage /salary job or self-employment,)
- 3. have been seeking job during the reference week and the preceding three weeks (have taken specific steps to seek paid employment or self-employment).

All people who, because of expecting to start a job in near future or return to their former job, have not been seeking a job - had no job but have been available to work - are also considered unemployed.

Labour force: the total of employed and unemployed people is labour force.

## Underemployment

The underemployed people are all employed people who have been present in or temporarily absent from the workplace and have worked less than 44 hours during the reference week due to economic reasons such as work recession, not finding a job with more hours, or non-work season, but have been willing and ready to do more work in the reference week.

<sup>&</sup>lt;sup>1</sup> ILO, Thirteenth International Conference of Labour Statisticians (Geneva, 1983).

#### **Indicators**

#### *Economic participation rate (activity rate)*

The ratio of the active population (employed & unemployed) 10 years of age or over (15 years of age or over) to the working age population 10 years of age or over (15 years of age or over) multiplied by 100.

Economically active population aged 10 or over (or aged 15 or over) Economic participation rate =  $----- \times 100$ Population aged 10 or over (or aged 15 or over)

Employment ratio: The ratio of the employed population aged 10 and over (or 15 and over) to the total population at working age, 10 years old and over (or 15 years and over) multiplied by 100

Employed population aged 10 or over (or aged 15 and over) Employment ratio =- $- \times 100$ 

Population aged 10 and over (or aged 15 and over)

#### **Unemployment rate**

The ratio of the unemployed population to the active population (employed & unemployed) multiplied by 100.

Unemployed population aged 10 or over (or aged 15 and over)

 $\times 100$ 

Unemployment rate =

Active population aged 10 and over (or aged 15 and over)

#### **Employment rate**

The ratio of the employed population to the active population (employed & unemployed) multiplied by 100.

Employed population aged 10 or over (or aged 15 and over)

Employment rate =

 $\times$  100 or 100-unemployment rate

Active population aged 10 and over (or aged 15 and over)

## Unemployment rate of the population aged 15-24 (or 15-29 years old)

The ratio of the unemployed population aged 15 -24 (or 15-29 years of age) to the economically active population at age 15-24 (or15-29) multiplied by 100.

Unemployed population aged 15-24 (or 15-29) Unemployment rate aged 15-24 (or15-29) = --- $\times 100$ 

Economically active population aged 15-24 (or 15-29)

	The ratio of unemployed higher education graduates to active higher education graduates multiplied by 100
	Unemployed higher education graduates
	Unemployment rate of higher education graduates =
	Share of unemployed higher education graduates aged 10 and over
	The ratio of unemployed higher education graduates aged 10 and over to the total unemployed population aged 10 and over multiplied by 100
	Unemployed higher education graduates aged 10 and over
Sha	are of unemployed higher education graduates aged 10 and over = $$
	Total unemployed population aged 10 and over
	Share of employed higher education graduates aged 10 and over
	The ratio of employed higher education graduates aged 10 and over to the total employed population aged 10 and over multiplied by 100
	Employed higher education graduates aged 10 and over
	Share of employed higher education graduates aged 10 and over =
	Total employed population aged 10 and over
	Underemployment share
	The ratio of the underemployed population to the employed population multiplied by 100
	Underemployed population
	Underemployed population Underemployment rate = $\times 100$

 $\times 100$