



# **Agricultural sector Index Numbers For the year 2016**

**Index numbers department  
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## Introduction

Index number department has created this report which include index number for (production quantity) of agricultural sector and (field prices) of the base year 2012, so the index number for agricultural sector 2016 report was prepared, including indices for (production quantities, field prices) to identify how changes in certain aspects of the agricultural sector and the adoption of a single base period for the same commodity basket.

The calculated indicators that don't include Kurdistan.

All years (2008-2013) which have been calculated by 2007 as a base year are included in this report in the last table, that is, all indices are actual based on 2007.

## Methodology: As following:

### I: Base year

Agricultural sector index numbers updated as 2012 base year, instead of 2007.

### II: Agricultural commodity basket

Commodity baskets consist for the base year 2012 of 3 main groups in agricultural sector, and in turn are regrouped into 19 sub-groups, and then to 84 agricultural products as follows:

1. **Plant production group include 12 sub-groups:** {grain, oilseed, bulbs and tubers, legumes, industrial crops, vegetables, citrus, fruits with hard core, other fruits, dates, fodder crops, accidentally}.
2. **Livestock production group President and comprising 6 sub-groups:** {red meat, eggs, chickens meat, milk, leathers, wool and hair}.
3. **Fishing production group include 1 sub-group:** {fishing production}.

### III: types of agricultural sector indices & formulae used in calculation

- A. Production quantity index numbers:** calculated by adopting (Laspeyres' formula) 2012 base year weights weighted as follows:

$$I_Q = \frac{\sum Q_1/Q_0 \times W}{\sum W} \times 100$$

In which:

$I_Q$ : index number for agricultural products

$Q_1$ : Production quantity of specific product in comparison year

$Q_0$ : Production quantity of specific product in base year

$W$ : Weight of product in base year

- B. Field prices index number:** The same formula also used in account field prices as follows:

$$I_p = \frac{\sum P_1/P_0 \times W}{\sum W} \times 100$$

In which:

$I_p$ : Index number for field price of agricultural product

$P_1$ : Field price for specific product in comparison year

$P_0$ : Field price for specific product in base year

$W$ : Weight of product in base year

(W) Has been accounted for each product by divided product value of that product on total of all products in base year 2012.

The above formulas are used to calculate the indices of production quantities and field prices of sub-groups and main of agricultural products in addition to agricultural sector General index number.

## Data sources

Depending on the following source group in Central Statistical organization when calculating agricultural sector index number:

### 1. Reports from agricultural statistics directorate for production quantity and field price as below:

#### A. Agricultural products field prices report

#### B. Production quantities reports include:

- 1- Citrus production quantities report-winter fruits
- 2- Summer fruit production
- 3- Date production
- 4- Crops & vegetables production
- 5- Wheat & barley straw production
- 6- Paddy hay production
- 7- Poultry
- 8- Office estimations livestock production tables

### 2. Directorate of national accounts: rely on tables (poultry) prices and production quantities:

1. Animal skins production quantities (total slaughtering)
2. Red meat production quantities
3. Prices of animal skins (prices of slaughter house)
4. Price for goat hair & sheep wool
5. The production quantity of goat hair & sheep wool

## **Analysis of index number for agricultural sector for year 2016 basis 2012**

p.s.: (Nineveh, Selah-al Deen, Al-Anbar) governorates were not included in data due to extreme conditions in them.

Table No. (4) Shows main categories indices in the agricultural sector for the following indicators:

### **1. Production quantities index number:**

General index number for production quantity in the agricultural sector reached (73.4%) in 2016 basis 2012 and increased from 2015 at a rate of (11.6%), production quantities consist of three main groups:

#### **A. Plant production quantities:**

Includes sub-groups of: (grain, oilseeds, bulbs, tubers, legumes, industrial crops, vegetables, citrus, fruits with hard core, other fruits, dates, fodder crops and accidentals).

Index number for plant production quantities reached (65.3%) in 2016 and increased from 2015 at a rate of (15.4%).

This returns to the obvious openness in importing various types of goods from the Arabic and Foreign markets including agricultural markets.

#### **B. Livestock production quantities:**

Includes sub-groups (red meat, eggs, chicken meat, milk, animal skins, goat hair and wool sheep).

Livestock production quantities index number reached (103.3%) in 2016 with an increase of (2.5%) from 2015.

This increase is due to the increase in the amount of table eggs from the sold and rented government projects.

As for milk, there is a very limited increase that is not commensurate with the size of the increasing demand for milk and its products, so resorting to the Arabic and foreign countries markets will meet local markets needs.

Iraq is still suffering from an obvious deficit in producing various components of animal production; this deficit is provided by importing from abroad, despite the availability of all ingredients to produce these leading products.

**C. Fishing Production quantities group:**

Includes (River fish and sea fish) sub-groups.

Fishing production quantities index number reached (84.6%) in 2016 and increased from 2015 at a rate of (21.6%).

The reason behind the increase of river fish production returns to the revive of most of the marshes and associated surfaces due to the high levels of water contained in these areas, also due to the strong turnout of citizens to Carp fish, which led to establishing modern projects for fish breeding (floating cages, closed system) as it has financial return for fish breeders, also the easy loans provided by the Agricultural Bank for them and the granted permissions to fish breeding in floating cages, as well as the increase in granted permissions for citizens according to the Ministry of Agriculture rule / Department of Animal Wealth.

As for the increase in sea fish production, it returns to granting Al- Basra governorate (3298) fishing permissions and (1542) boat permissions until 13/12/2016 which led to the increase in the marketed sea fish to Al-Alawi according to the Ministry of Agriculture rule / Department of Animal Wealth.

**2. field prices index number:**

Field prices index number in the agricultural sector reached (86.8%) in 2016 basis 2012 with a decrease of (13.5%) from 2015.

There is an inverse relationship between quantity and price, when so ever quantity decreases, prices increases, and vice versa.

Field prices consist of three main fields:

**A. Plant production field prices:**

Plant production field prices index number reached (83.4%) in 2016 decreasing at a rate of (16.2%) from 2015.

**B. Livestock production field prices:**

Livestock production field prices index number reached (99.3%) in 2016 decreasing at a rate of (3.1%) from 2015.

**C. Fishing Group field prices:**

Fishing field prices index number reached (95.0%) in 2016 decreasing at a rate of (13.6%) from 2015.

**PLANT PRODUCTION SUB-GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD  
(2015-2016) BASIS 2012**

Table(1)

No.	Plant production sub-groups	sub-groups weight	Production quantity index number		Rate of change %	field prices index number		Rate of change %
			2015	2016		2015	2016	
1	grains	25.019	68.6	83.2	21.3	84.1	75.1	-10.7
2	oilseeds	0.280	12.2	14.5	18.9	118.3	110.4	-6.7
3	bulbs and tubers	3.641	25.0	27.9	11.6	107.0	96.0	-10.3
4	legumes	0.159	33.9	62.8	85.3	116.3	109.1	-6.2
5	industrial crops	0.336	0.3	0.6	100.0	122.4	135.8	10.9
6	vegetables	17.632	36.5	31.2	-14.5	102.4	75.2	-26.6
7	citrus	0.775	76.4	82.3	7.7	91.7	89.5	-2.4
8	fruits with hard core,	0.472	48.9	51.2	4.7	99.4	101.7	2.3
9	other fruits	2.797	55.6	57.1	2.7	110.5	113.9	3.1
10	dates	2.830	92.8	95.3	2.7	114.5	121.8	6.4
11	fodder crops	3.991	38.3	52.0	35.8	99.9	88.1	-11.8
12	accidently	19.634	65.0	81.3	25.1	110.8	86.0	-22.4
<b>General total Plant production</b>		<b>77.566</b>	56.6	65.3	15.4	99.5	83.4	-16.2

**LIVESTOCK PRODUCTION SUB-GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD  
(2015-2016) BASIS 2012**

Table(2)

No.	livestock production sub-groups	sub-groups weight	Production quantity index number		Rate of change %	field prices index number		Rate of change %
			2015	2016		2015	2016	
1	Red meat	14.098	105.4	107.3	1.8	99.3	95.2	-4.1
2	eggs	1.282	51.1	64.4	26.0	108.8	106.8	-1.8
3	chicken meat	2.392	96.2	96.9	0.7	106.8	92.5	-13.4
4	milk	1.815	106.1	108.2	2.0	117.8	134.8	14.4
5	animal skins	0.185	103.7	104.9	1.2	60.2	50.6	-15.9
6	hair and wool	0.237	101.5	102.0	0.5	126.2	136.5	8.2
<b>General total livestock production</b>		<b>20.009</b>	<b>100.8</b>	<b>103.3</b>	<b>2.5</b>	<b>102.5</b>	<b>99.3</b>	<b>-3.1</b>

**FISHING PRODUCTION SUB-GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD  
(2015-2016) BASIS 2012**

(3)Table

No.	Fishing production sub-groups	sub-groups weight	Production quantity index number		Rate of change %	field prices index number		Rate of change %
			2015	2016		2015	2016	
1	see and river fish	2.429	69.6	84.6	21.6	110.0	95.0	-13.6
<b>General total Fishing production</b>		<b>2.429</b>	<b>69.6</b>	<b>84.6</b>	<b>21.6</b>	<b>110.0</b>	<b>95.0</b>	<b>-13.6</b>



**AGRICULTURAL MAIN GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD  
(2015-2016) BASIS 2012**

Table(4)

No.	Agricultural production main groups	main groups weight	Production quantity index number		Rate of change %	field prices index number		Rate of change %
			2015	2016		2015	2016	
1	Plant prouduction	77.566	56.6	65.3	15.4	99.5	83.4	-16.2
2	Livestock prouduction	20.009	100.8	103.3	2.5	102.5	99.3	-3.1
3	Fishing prouduction	2.429	69.6	84.6	21.6	110.0	95.0	-13.6
<b>General total in Agricultural sector</b>		<b>100</b>	65.8	73.4	11.6	100.4	86.8	-13.5

Figure (1): index numbers for agricultural production quantity for the period (2015-2016) basis2012

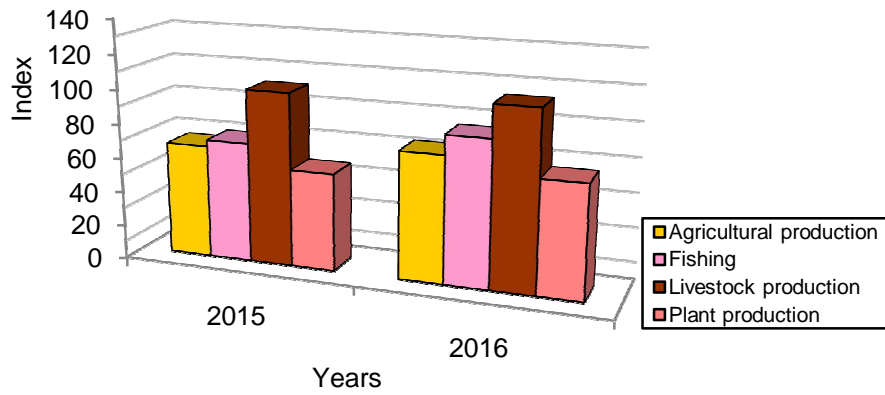
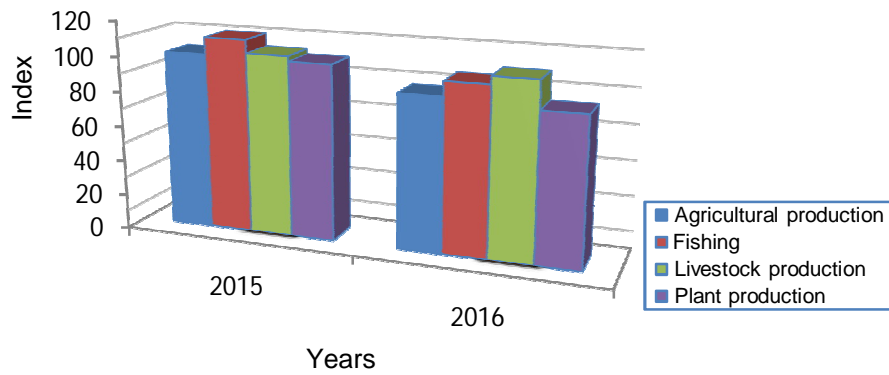


Figure (2): index numbers for agricultural field price for the period (2015-2016) basis2012



**AGRICULTURAL MAIN GROUPS INDEX NUMBERS FOR THE PERIOD (2008-2016)  
BASIS 2007**

Table(5)

(2007=100)

Year	Production quantity index number				Field prices index number			
	Plant	livestock	Fishing	General agricultural	Plant	livestock	Fishing	General agricultural
<b>2008</b>	79.9	108.2	95.6	84.1	127.4	134.5	104.7	127.9
<b>2009</b>	78.1	110.0	97.2	82.9	136.1	167.6	115.5	139.9
<b>2010</b>	86.4	112.0	105.8	90.3	146.2	188.4	117.0	151.2
<b>2011</b>	105.1	114.0	97.4	106.1	151.9	189.9	124.7	156.5
<b>2012</b>	113.4	116.0	135.5	114.2	154.4	192.5	131.2	159.0
<b>2013</b>	143.6	118.1	220.6	141.9	156.7	195.5	128.6	161.3
<b>2014</b>	152.9	111.5	174.4	144.9	151.3	198.1	139.5	157.7
<b>2015</b>	64.2	116.9	94.3	75.1	153.6	197.3	144.3	159.6
<b>2016</b>	74.1	119.8	114.6	83.8	130.2	191.2	124.6	138.0

Note1: All years (2008-2013) which has been calculated by 2007 as a base year are included in this table, i.e. all indices are actual based on 2007.

Note2: From 2014 above, index numbers will be calculated by linking chains for the base year 2007.