



Agricultural sector Index Numbers For the year 2017

**Index numbers department
August 2018**

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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 2017 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. Production quantities reports include:

- 1- Citrus production - winter fruits (Orange...).
- 2- Summer fruit production (Grapes, Apricot).
- 3- Date production.
- 4- Total crops & vegetables production (bat not depending here Dry onion including Boiler onion).
- 5- Primary crops & vegetables production (independent Dry onion, Boiler onion).
- 6- Cotton, maize and potatoes production.
- 7- Wheat & barley straw production.
- 8- Paddy hay production.
- 9- Poultry (live broiler chickens, eggs).
- 10- Office estimations livestock production tables (Milk, fish).

B. Agricultural products field prices report.

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 Numbers for Agricultural Sector for 2017 basis2012

p.s.:(Nineveh,Selah-al Deen,Al-Anbar,Haweeja of Kirkuk and Some Rural regions of Diala) governorates were not included in data due to the security status in them, also Kurdistan region was not included in this report, so results and comparisons with the previous year for2016 has been analyzed,only,for the included governorates.

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 (80.2%) in 2017 basis2012 and increased from 2016 at a rate of (9.3%).

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 (73.1%) in 2017 and increased from 2016 at a rate of (11.9%).

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 (106.2%) in 2017 with an increase of (2.8%) from 2016.

C. Fishing Production quantities group:

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

Fishing production quantities index number reached (94.2%) in 2017 with an increase from 2016 at a rate of (11.3%).

2. field prices index number:

Field prices index number in the agricultural sector reached (87.1%) in 2017 basis2012 with an increase of (0.3%) from 2016.

While the reason behind the decrease in field prices index number returns to the increase in production quantities in agricultural sector because 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 (84.0%) in 2017 with an increase of (0.7%) from 2016.

B. Livestock production field prices:

Livestock production field prices index number reached (99.2%) in 2017 decreasing at a rate of (0.1%) from 2016.

C. Fishing Group field prices:

Fishing field prices index number reached (85.9%) in 2017 decreasing at a rate of (9.6%) from 2016.

**PLANT PRODUCTION SUB-GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD
(2016-2017) 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 %
			2016	2017		2016	2017	
1	grains	25.019	83.2	79.0	-5.0	75.1	68.6	-8.7
2	oilseeds	0.280	14.5	18.8	29.7	110.4	72.1	-34.7
3	bulbs and tubers	3.641	27.9	38.0	36.2	96.0	90.3	-5.9
4	legumes	0.159	62.8	45.5	-27.5	109.1	95.5	-12.5
5	industrial crops	0.336	0.6	0.7	16.7	135.8	159.8	17.7
6	vegetables	17.632	31.2	34.0	9.0	75.2	92.7	23.3
7	citrus	0.775	82.3	83.5	1.5	89.5	90.3	0.9
8	fruits with hard core,	0.472	51.2	55.1	7.6	101.7	101.7	0.0
9	other fruits	2.797	57.1	59.7	4.6	113.9	117.3	3.0
10	dates	2.830	95.3	95.4	0.1	121.8	121.1	-0.6
11	fodder crops	3.991	52.0	38.2	-26.5	88.1	90.2	2.4
12	accidently	19.634	81.3	115.1	41.6	86.0	81.5	-5.2
General total Plant production		77.566	65.3	73.1	11.9	83.4	84.0	0.7

**LIVESTOCK PRODUCTION SUB-GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD
(2016-2017) 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 %
			2016	2017		2016	2017	
1	Red meat	14.098	107.3	109.3	1.9	95.2	94.2	-1.1
2	eggs	1.282	64.4	66.1	2.6	106.8	114.3	7.0
3	chicken meat	2.392	96.9	107.0	10.4	92.5	90.5	-2.2
4	milk	1.815	108.2	109.9	1.6	134.8	137.6	2.1
5	animal skins	0.185	104.9	106.2	1.2	50.6	50.3	-0.6
6	hair and wool	0.237	102.0	102.6	0.6	136.5	147.5	8.1
General total livestock production		20.009	103.3	106.2	2.8	99.3	99.2	-0.1

**FISHING PRODUCTION SUB-GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD
(2016-2017) 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 %
			2016	2017		2016	2017	
1	see and river fish	2.429	84.6	94.2	11.3	95.0	85.9	-9.6
General total Fishing production		2.429	84.6	94.2	11.3	95.0	85.9	-9.6

**AGRICULTURAL MAIN GROUPS INDEX NUMBERS AND RATES OF CHANGE FOR THE PERIOD
(2016-2017) 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 %
			2016	2017		2016	2017	
1	Plant prouduction	77.566	65.3	73.1	11.9	83.4	84.0	0.7
2	Livestock prouduction	20.009	103.3	106.2	2.8	99.3	99.2	-0.1
3	Fishing prouduction	2.429	84.6	94.2	11.3	95.0	85.9	-9.6
General total in Agricultural sector		100	73.4	80.2	9.3	86.8	87.1	0.3

Figure (1): index numbers for agricultural production quantity for the period (2016-2017) basis2012

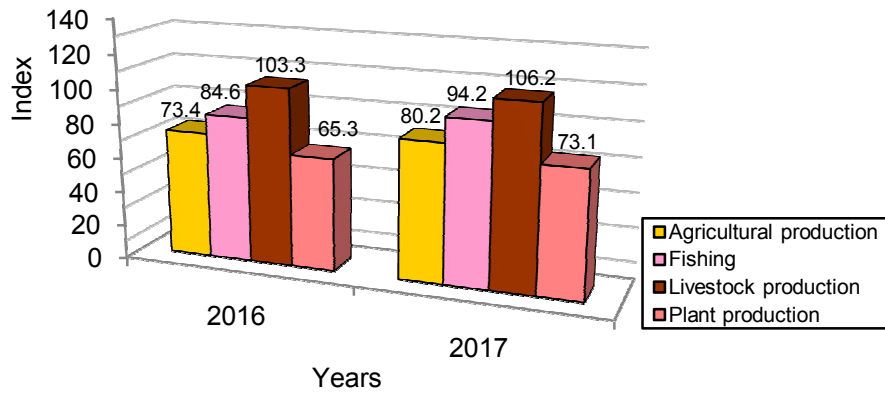
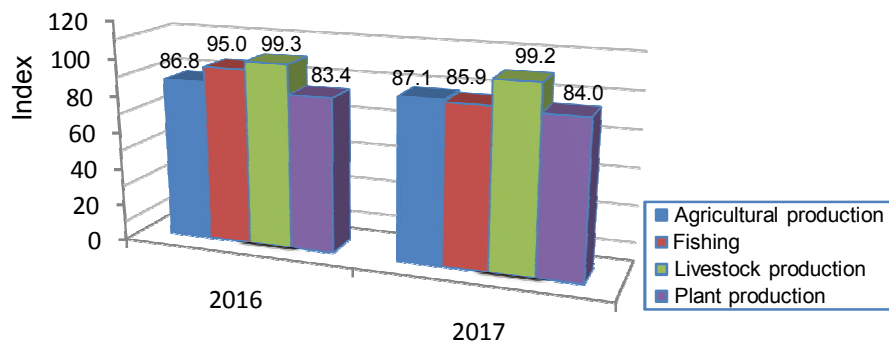


Figure (2): index numbers for agricultural field price for the period (2016-2017) basis2012



**AGRICULTURAL MAIN GROUPS INDEX NUMBERS FOR THE PERIOD (2008-2017)
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
2008	79.9	108.2	95.6	84.1	127.4	134.5	104.7	127.9
2009	78.1	110.0	97.2	82.9	136.1	167.6	115.5	139.9
2010	86.4	112.0	105.8	90.3	146.2	188.4	117.0	151.2
2011	105.1	114.0	97.4	106.1	151.9	189.9	124.7	156.5
2012	113.4	116.0	135.5	114.2	154.4	192.5	131.2	159.0
2013	143.6	118.1	220.6	141.9	156.7	195.5	128.6	161.3
2014	152.9	111.5	174.4	144.9	151.3	198.1	139.5	157.7
2015	64.2	116.9	94.3	75.1	153.6	197.3	144.3	159.6
2016	74.1	119.8	114.6	83.8	130.2	191.2	124.6	138.0
2017	82.9	123.2	127.6	91.6	129.7	191.0	112.7	138.5

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.