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Real Estate Property Price Index Annual Report in Kurdistan Region

2022

Consumer price Index Department

May 2025

Kurdistan Region Government
Ministry of Planning
Kurdistan Region Statistics Office

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Preface

Kurdistan Region Statistics Office (KRSO) has sought to provide social, economic, and demographic statistical data in various forms for decision-makers, policymakers, and researchers. KRSO continuously works to Develop its technical skills and capabilities to achieve a high standard in this field.

As there were no data and indicators on land and residential properties in Kurdistan Region, KRSO decided to conduct a survey to address the needs of government institutions in this field. The survey was carried out in three stages on a semi-annual basis: the second half of 2021, the first half of 2022, and the second half of 2022. The results of this survey provide decision-makers with evidence-based data to make informed decisions.

This survey, conducted for the first time in Iraq and Kurdistan Region, positions the region at the forefront of Arab countries, following Tunisia and Saudi Arabia. The survey was conducted at the center and district levels of governorates through field visits exclusively to residential areas. Because of price variations, residential areas were categorized into three living standards: high, medium, and low.

starting of this survey in Kurdistan Region could help to enrich statistics and provide indicators for beneficiaries, both in government institutions and in the private sector.

Seerwan Mohamed Muhialdeen
President of Kurdistan Region Statistics Office

Acknowledgment

We express our gratitude to the entities and individuals, including the employees of Kurdistan Region Statistics Office (KRSO) and the statistics directorates in the governorates, who contributed to the preparation of this report and ensured its success at all stages of data collection, tabulation, analysis, and publication. We also thank the Central Statistics Organization for its cooperation in this work.

Team work

High committee

- Seerwan Mohamed Muhialdeen/ President of KRSO
- Saman Izadeen Rashid/Director of Erbil Governorate Statistics
- Shwan Jabbar Fattah/ Directorate of Sulaymaniyah Governorate Statistics
- Chyavan Abdulrrazaq Sleman/ Directorate of Duhok Governorate Statistics
- Shahla Hani Ali/ Survey supervisor/ KRSO

Technical and survey supervision committee

- Shahla Hani Ali / Central Supervisor/ KRSO

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- Shahla Hani Ali / KRSO

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Contents

Tables

Chart

Introduction

Real estate, being the largest capital investment for a family and closely linked to other economic sectors, plays an important role in the economy. Changes in real estate prices impact inflation, monetary policies, and financial stability. This has led several Arab countries to develop a framework for monitoring the prices of various real estate types, such as residential and commercial buildings, and land, by measuring the real estate price index.

To align with international and regional standards, the Kurdistan Region Statistics Office (KRSO) and the Central Statistics Organization (CSO) have collaborated to develop comprehensive statistics in Iraq. This collaboration led to the publication of a report on the land and residential properties index (houses and apartments) (RPPI), Residential Property Price Index, with weights based on 2022. It is noteworthy that the real estate-related indicators are being calculated for the first time in Iraq and the Kurdistan Region.

Objectives

- To monitor the prices of various types of real estates over time,
- To reveal the value of real estate as a key component of investment activities in the economy,
- Real estate as an important economic indicator can be used to predict economic growth,
- To use in monetary policy, especially at the time of implementing Inflation targeting policy,
- To estimate the value of houses as part of wealth measurement,
- To show financial strength and stability and asses market risk,
- To use adjust national account from nominal to real value,
- To help consumers in deciding to buy or sell their real estate properties,
- To use in the calculation of consumer price index,
- To facilitate international comparison.

Data source

Mechanism for Collecting Real Estate Prices:

Prices are gathered from real estate Bureaus located in central districts and key districts within each governorate, focusing on population density and property type (land, house, or apartment) to ensure comprehensive coverage across different living standards. Three real estate offices were visited in each selected administrative area. Prices were recorded for vacant land across various standards of living (high, medium, and low) and ten different area sizes. House prices are collected similarly, considering living standards and area size, with additional details on the year of construction (before or after 1990). Apartment prices are collected using the same method, classified according to different living standards and seven area size categories.

The sample was selected from real estate   representing all administrative units according to a number of variables, such as property value, area, type of sector (residential/commercial/agricultural), type of property in the sector (residential plot/residential building/villa/apartment/house/ Commercial plots/commercial buildings/exhibitions/shops/commercial centers/agricultural land) and geographical location of the property (area/city/quarter), which achieves the objectives of the real estate price index process in different sectors on a semi-annual basis.

Definitions

Index Number: The index number is defined as a relative number that measures the change in one or more variables and calculated by taking the ratio of the value of a variable in the current period to its value in a reference period, often expressed as a percentage.

Real Estate Price Index: is a statistical measure that tracks changes in the prices of real estate properties over time.

The Relative Importance of Real State: it is the ratio of the total value of transactions for a specific type of real estate to the total value of transactions for all real estate types in the base year.

Base Year: The base year is the year or period used as a reference point against which all other years are compared. It is usually set to 100. When selecting the base year, it is important to ensure that it is a normal and stable year, free from sudden events and situations such as economic crises and wars. Additionally, the base year should be relatively close to the comparison period to maintain relevance and accuracy.

Moving year: This is the year in which comparisons are made between its two halves, known as the moving basis. That is, the second half of a year comparing with the first half of the same year, as well as comparing it with the same halves of the previous year. This means the year is dynamic both within itself and in comparison, to the previous years.

This survey relies on the year 2021 as the base year, in which the survey conducted for the first time. We select the second half of the year 2021 and relied on it as the base year. In 2022, we started comparing the second half of 2021 with the first half of 2022, then comparing the first half of 2021 and 2022 with the second half of 2022.

Calculating the real estate price index

The following equations are used to calculate the real estate index:

1. Jevons Index: it is used for aggregation at the primary level and used for short-term index calculation.
2. Laspeyres: it is used to calculate the higher levels, noting that the weights were calculated for the year 2022.

Statistical classification

Classification is defined as a set of related categories used to group data based on similarity. Classification is a basis for collecting and publishing data in different statistical areas, such as: economic activity, production, expenditure, job, health, etc.). Classification of data and information allows them to be placed into meaningful categories to produce useful statistics. Data collection needs to be carefully and systematically arranged according to their common characteristics to make statistics reliable and comparable. To collect the price of real estate, it was relied on classifying the real estates into three main sectors:

Residential sector: It consists of a residential plot of land, a residential building, a villa, an apartment, or a house.

Commercial sector: It consists of a commercial plot of land, a commercial building, an exhibition (shop), or a commercial center.

Agricultural sector: it consists of agricultural land.

Note: This survey includes only the residential sector.

Weights (relative importance)

The weights were assigned based on the value of real estate transactions for each of the categories that make up the index in each district, city, and region in the base year. the region was divided as follows:

And each classification divided into 11 area sizes or categories (50.75,75-100m^2.......)

levels:

- High
- Middle
- Low
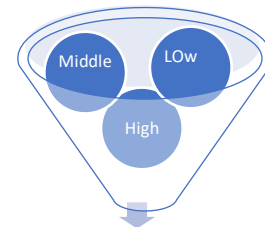
Each level consists the following classification:

- Lands
- Residential sector (Houses, Apartment)

Coverage

Area Coverage: The real estate price index covers some administrative area in the region. The region is divided as follows:
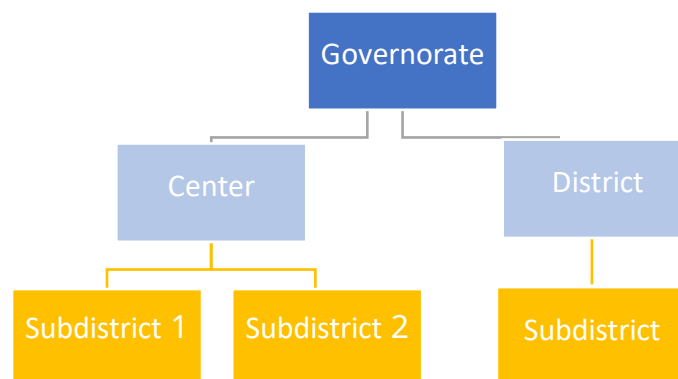
Time Coverage: The year is divided into two time periods according to the following picture:
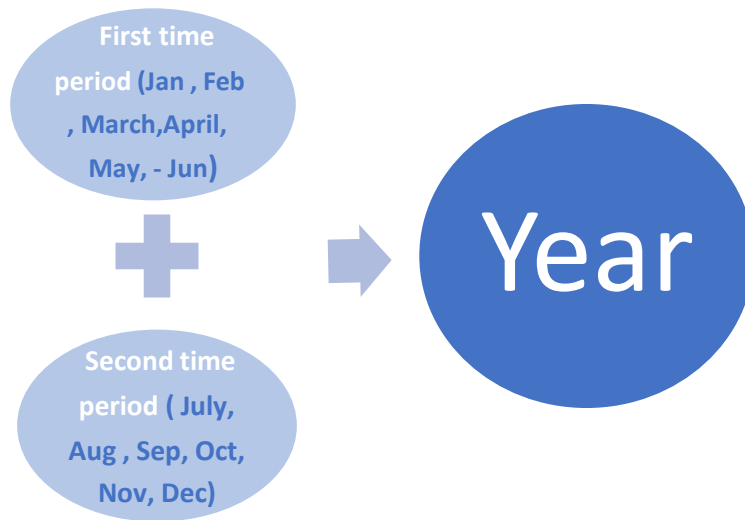
Real estate Index Structure: In light of the information and classifications approved by the Land and Survey department, the following structure was adopted for the real estate asset price index in the region.
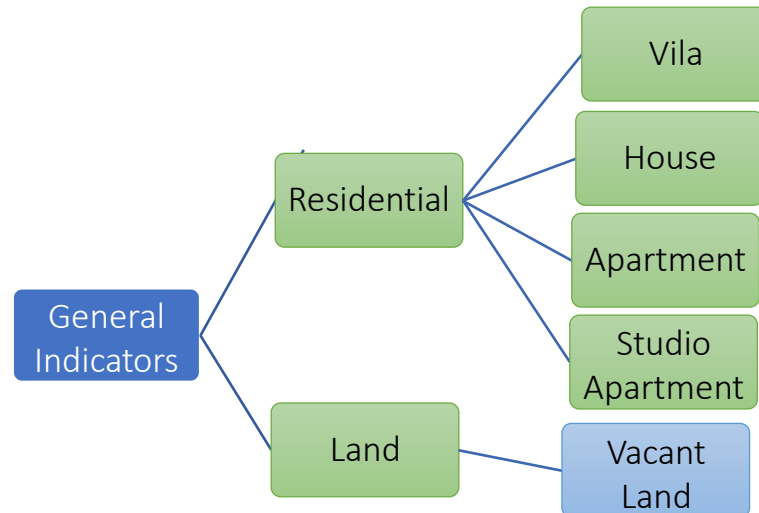
Kurdistan Region Statistics Office (KRSO) publishes the annual report of this survey in PDF format on its official website and various social media platforms to make it accessible to all users and those interested in real estate prices.

Results

Analysis of Land price index in Kurdistan Region for the year 2022 by base year or base period (second half of 2021)

1) For the first half of 2022, land Price index reached 125.3, which represents an increase of 10.5 % compared to the second half of 2021 (113.4).

2) for the second half of 2022, land Price index reached 126.3 showing an increase of 0.8% compared to the first half of 2022.

3) in 2022, residential land Price index accounts for 125.8, which shows an increase of 12.1 % compared to 2021.

Figure 1 : Land price index in Kurdistan region and Iraq (central and southern governorates) in 2022 by base period

	first half 2022	Second half 2022
——	125.3	126.3
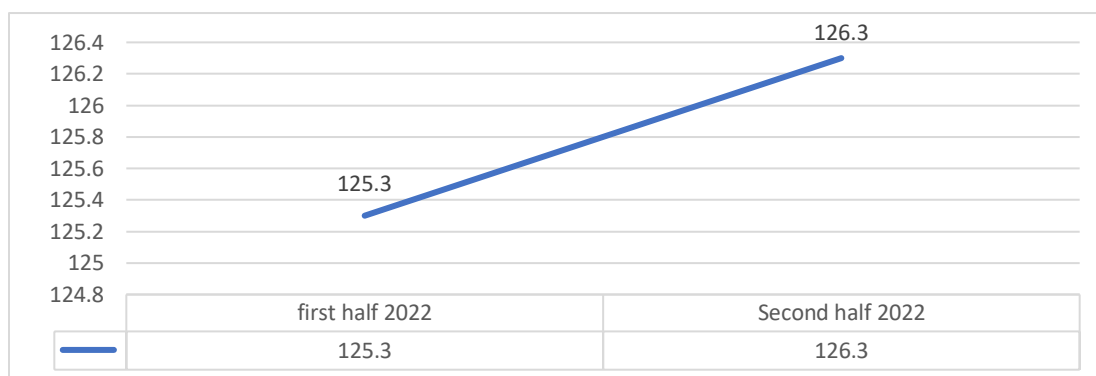
Figure 2 : Land price index and annual percentage change in Kurdistan region and Iraq (south, center) in 2022 by base period

■ 2022 ■ 2021 ■ Change rate % ■

Land price index in the governorates of Kurdistan Region for the year 2022 by base period (second half of 2021)

Erbil governorate

1) For the first half of 2022, land Price index was 133.1 showing an increase of 5.7% compared to the second half of 2021.

2) And for the second half, land Price index reached 134.9 representing an increase of 1.4% compared to the first half of 2022.

3) in 2022, residential land Price index was 134.0, showing an increase of 6.1% compared to 2021.

Sulaymaniyah governorate

1) For the first half of 2022, land Price index was 121.57 showing an increase of 5.2% comparing to the second half of 2021.

2) And for the second half, land Price index reached 123.8 representing an increase of 1.9% compared to the first half of 2022.

3) in 2022, residential land Price index was 122. showing an increase of 10.1% comparing to 2021.

Duhok governorate

1) For the first half of 2022, land Price index was 121.3 showing an increase of 22.9% compared to the second half of 2021.
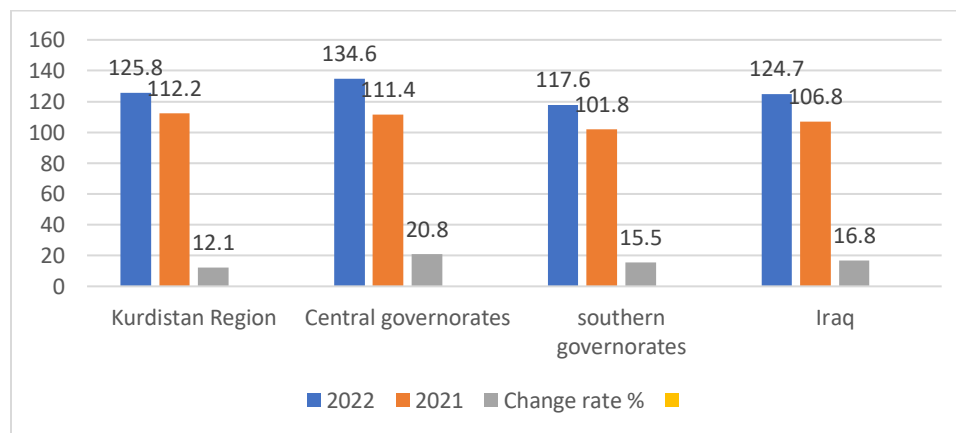
2) And for the second half, land Price index reached 120.2 representing a decrease of 0.9% compared to the first half of 2022 (121.3).

3) in 2022, residential land Price index accounted for 120.7, showing an increase of 21.7% compared to 2021.

Figure 3: Land price index and annual percentage change in Kurdistan region's governorates in 2022 by base period
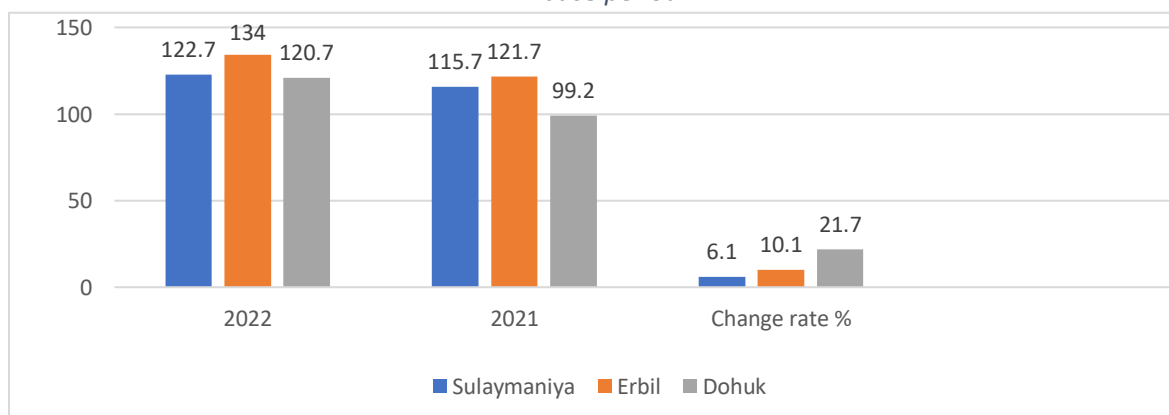
Regions	First half of 2022	Second half of 2021	% Change
Erbil	133.1	125.9	5.7
Sulaymaniyah	121.5	115.5	5.2
Duhok	121.3	98.7	22.9
Kurdistan region	125.3	113.4	10.5
Central governorates	131.3	112.4	16.8
Southern governorates	113.7	102.4	11.0
Iraq	121.5	107.6	12.9

Table 2: Land price index for the second half of 2022 by base period

Regions	2nd half of 2022	1st half of 2022	% Change
Erbil	134.9	133.1	1.4
Sulaymaniyah	123.8	121.5	1.9
Duhok	120.2	121.3	-0.9
Kurdistan region	126.3	125.3	0.8
Central governorates	138.0	131.3	5.1
Southern governorates	121.7	113.7	7.0
Iraq	127.9	121.5	5.3

Table3 : Annual land price index for the year 2022 by base period

Governorate	2022	2021	Rate of change %
Erbi	134.0	121.7	10.1
Sulaymaniyah	122.7	115.6	6.1
Duhok	120.7	99.2	21.7
Kurdistan region	125.8	112.2	12.1
Central governorates	134.6	111.4	20.8
Southern governorates	117.6	101.8	15.5
Iraq	124.7	106.8	16.8

Residential sector price index in Kurdistan Region for the year 2022 by base period (second half of 2020)

1) For the first half of 2022, residential Price index was 119.4 showing an increase of 3.0% compared to the second half of 2021 (115.9).

2) And for the second half, residential Price index reached 122.1 representing an increase of 2.3% compared to the first half of 2022(119.4).

3) in 2022, residential Price index accounted for 120.7.

Figure 4: Trend of Residential Price Index in Kurdistan Region for the Year 2022 by Base Period

	First half of 2022	Second half of 2022
	119.4	122.1

Figure 4 : Residential Price Index and annual percentage change by Base Period in Kurdistan Region and Iraq (south and center) in 2021 and 2022
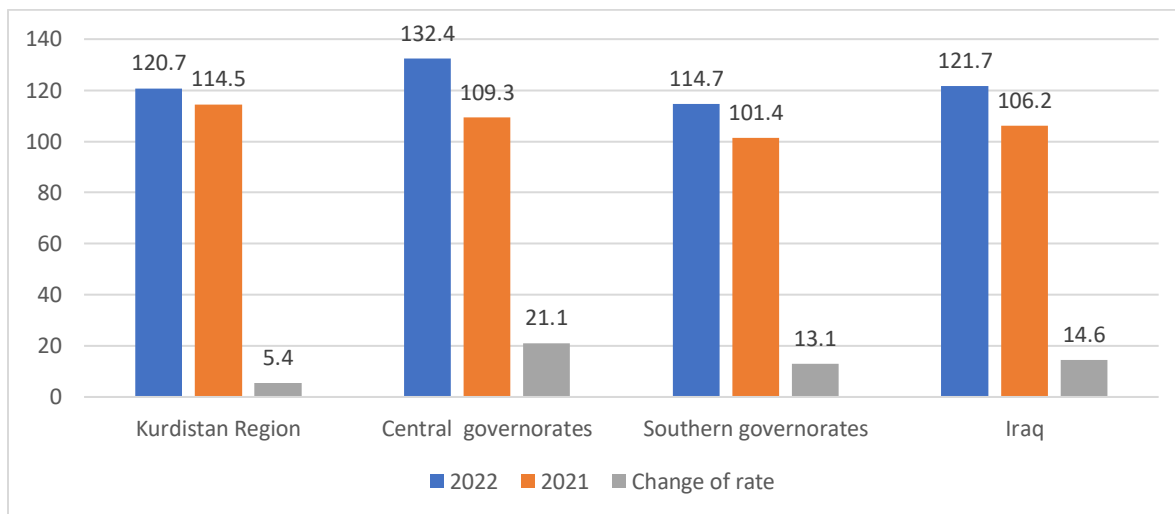
Residencial price index in the governorates of Kurdistan Region for the year 2022 by base period (second half of 2020)

Erbil governorate

1) For the first half of 2022, residential price index recorded 139.2, showing an increase of 11.4% compare to the second half of 2021.

2) The second half of 2022, residential price index presented a record of 140.7 showing an increase of 1.1% compared to the first half of 2022 (139.2).

3) in 2022, Residencial price index reached 140, , showing an increase of 12.8% compare to 2021.

Sulaymaniyah governorate

1) For the first half of 2022, residential price index recorded 98.4, showing a decrease of 14.4% compared to the second half of 2021.

2) For the second half of 2022, residential price index presented a record of 98.42, showing an increase of 0.02% compared to the first half of 2022 (98.4).

3) in 2022, Residencial price index recorded 98.4, showing a decrease of 14.9% compared to 2021.

Duhok governorate

1) For the first half of 2022, residential Price index reached 120.5, showing an increase of 11.9% compared to the second half 2021.

2) In the second half of 2021, residential Price index reached 127.1 representing a decrease of 5.5% compared to the first half of 2022.

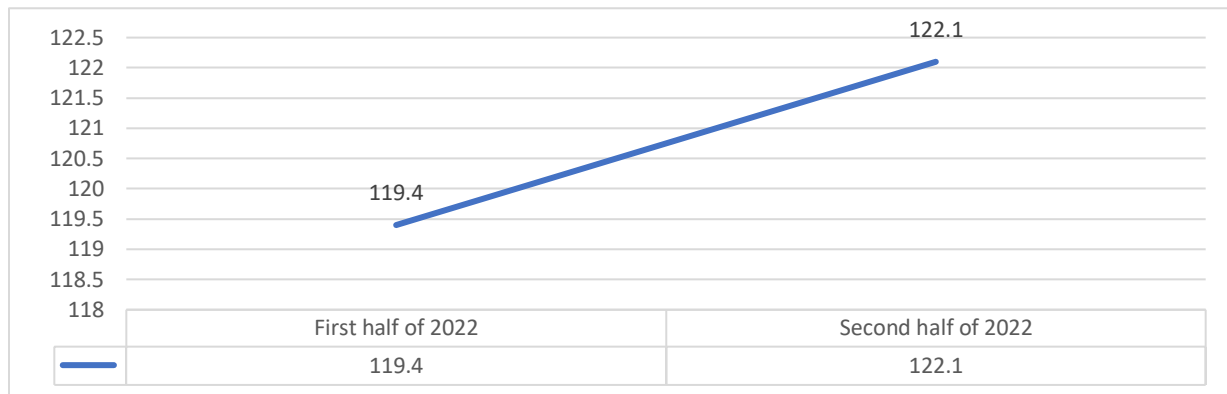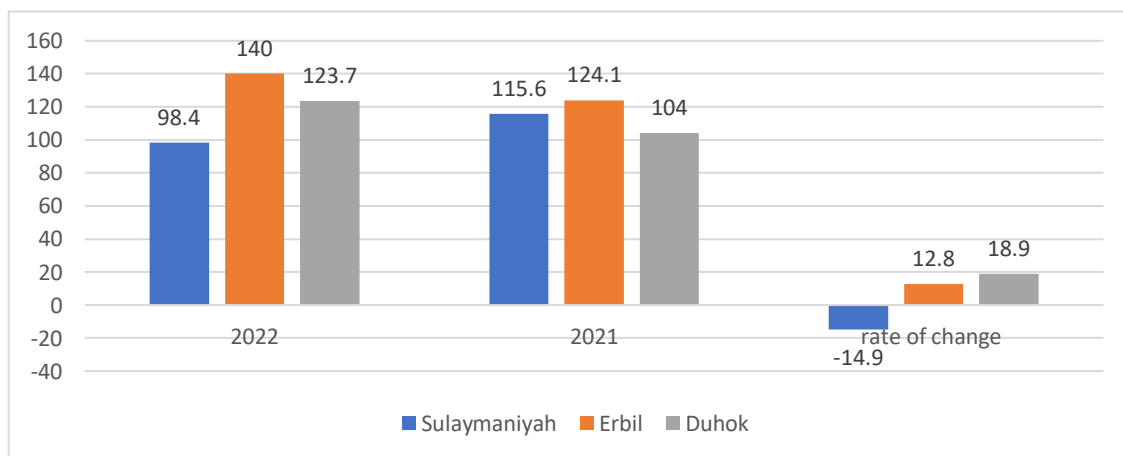3) in 2022, residential Price index accounted for 123.7, showing an increase of 18.9% compared to 2021.

Figure 5 : Residential price index and annual percentage change by base period in Kurdistan Region and Iraq (south, center) in 2022

Table 4 : Residential sector price index for the first half of 2022 by base period

Regions	1st half 2022	2nd half 2021	Change rate %
Erbil	139.2	124.9	11.4
Sulaymaniyah	98.4	115.0	-14.4
Duhok	120.5	107.7	11.9
Kurdistan Region	119.4	115.9	3.0
Central Governorates	129.1	109.9	17.5
Southern Governorates	112.4	102.1	10.1
Iraq	119.2	107.0	11.4

Table 5 : Residential sector price index for the second half of 2022 by base period

Regions	2nd half 2022	1st half 2022	%Change rate
Erbil	140.7	139.2	1.1
Sulaymaniyah	98.42	98.4	0.02
Duhok	127.1	120.5	5.5
Kurdistan Region	122.1	119.4	2.3
Central Governorates	135.8	129.1	5.2
Southern Governorates	117.1	112.4	4.2
Iraq	124.2	119.2	4.2

Table 6: Residential sector price index for the second half of 2022 by base period

Governorate	2022	2021	rate of change %
Erbil	140.0	124.1	12.8
Sulaymaniyah	98.4	115.6	-14.9
Duhok	123.7	104.0	18.9
Kurdistan Region	120.7	114.5	5.4
Central Governorates	132.4	109.3	21.1
Southern Governorates	114.7	101.4	13.1
Iraq	121.7	106.2	14.6

Analysis of **Land Price** Index in Kurdistan Region for 2022 by rolling base (Period-on-Period Bases)

1) For the first half of 2022, on a moving bases (period-on-period bases), land price index reached 111.2 showing an increase of 9.1% compared to the second half of 2021.

2) For the second half of 2022, land price index reached 100.8 on a moving bases showing a decrease of 9.4% compared to the first half of 2022.

3) in 2022, residential price index accounting for 105.9, showing a decrease of 0.5% compared to 2021

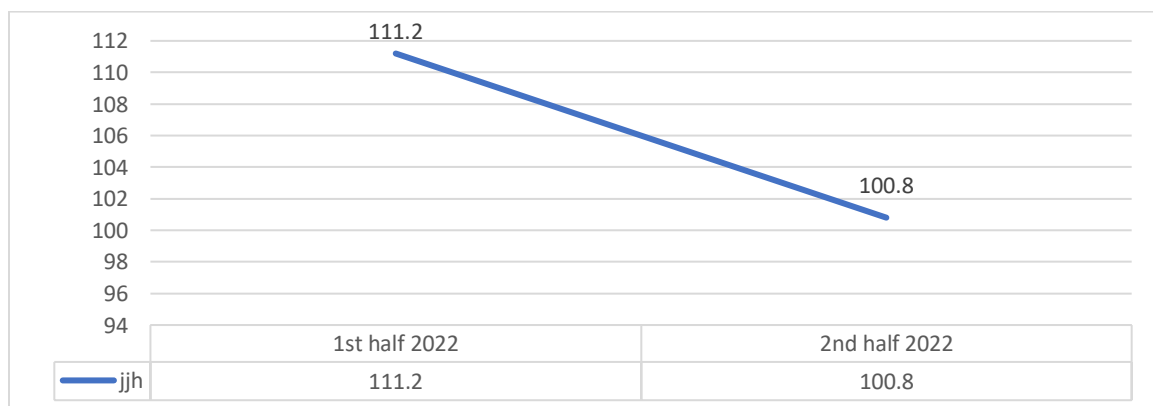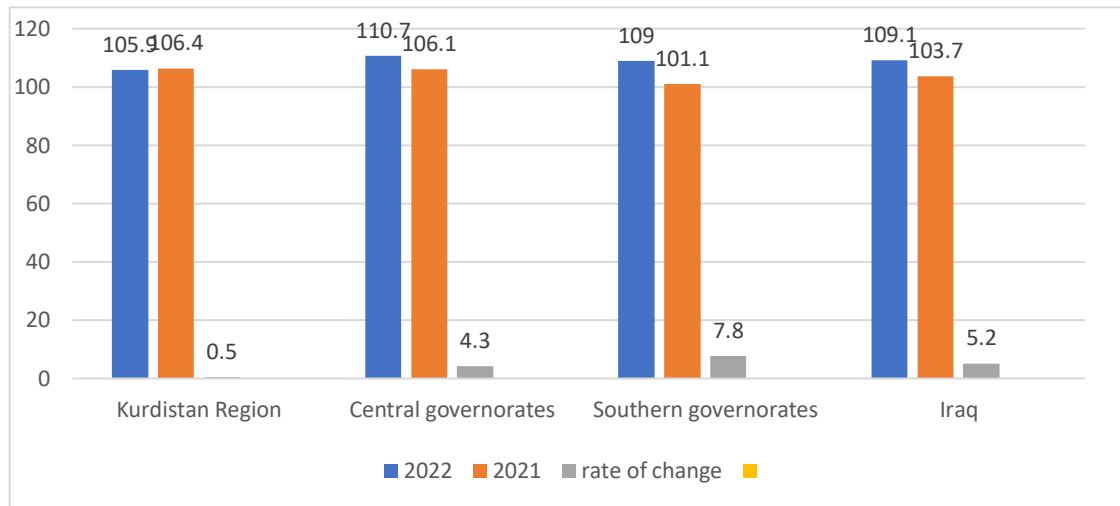*Figure 7 : Trend of land Price Index in Kurdistan Region on moving bases*

	1st half 2022	2nd half 2022
jjh	111.2	100.8

Figure 6 : land price index and annual percentage change in Kurdistan Region and Iraq (center, south) on Moving base in 2022

Land Price Index in Kurdistan region's governorates in 2022 on **moving bases**

Erbil Governorate

1) For the first half of 2022, land price index recorded 105.6 in Erbil governorate representing a decrease of 1.2% compared to the second half of 2021.

2) For the second half 2022, land price index on moving bases reached 101.4 showing a decrease of 4.0% compared to the first half of 2022.

3) in 2022, residential land price index in Erbil governorate was recorded at 103.5, showing a decrease of 7.8% compared to 2021.

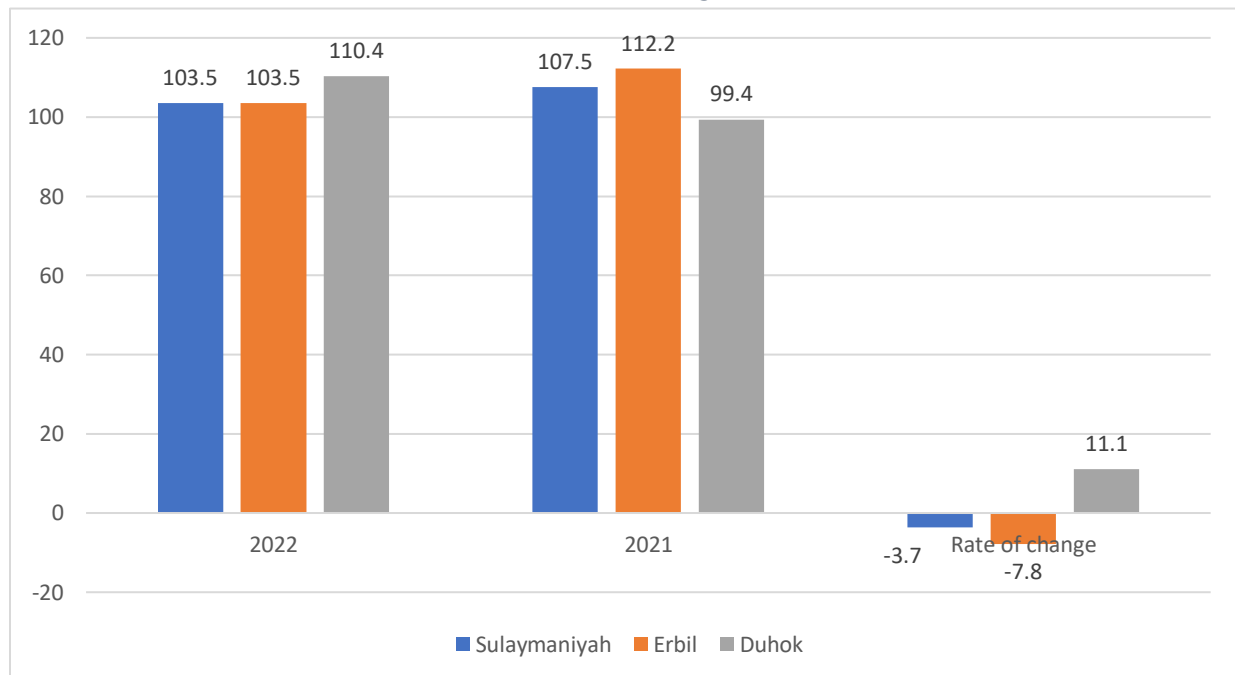### Sulaymaniyah Governorate

1) For the first half of 2022, land price index recorded 105.1 representing an increase of 5.3% compared to the second half of 2021.

2) For the second half 2022, on moving bases, land price index reached 101.9 showing a decrease by 3.0% compared to the first half of 2022.

3) in 2022, residential land price index recorded 112.2, showing a decrease by 3.7% compared to 2021.

Duhok Governorate

1) For the first half of 2022, land price index recorded 99.7 in Duhok governorate representing an increase of 24.2% compared to the second half of 2021.

2) For the second half 2022, on moving bases, land price index reached 99.1 in Duhok governorate showing a decrease by 19.4% compared to the first half of 2022.

3) in 2022, residential land price index was recorded at 99.4, showing an increase of 11.1% compared to 2021.

Figure 7: land price index and annual percentage change in governorates of Kurdistan Region in 2022 and 2021 on Moving base

Table 7 : Land Price Index on moving bases for the first half of 2022

Regions	1st half 2022	2nd half 2021	Change rate %
Erbil	105.6	106.9	-1.2
Sulaymaniyah	105.1	99.8	5.3
Duhok	123.0	99.0	24.2
Kurdistan Region	111.2	101.9	9.1
Central governorates	114.9	101.9	12.8
Southern governorates	110.9	101.1	9.7
I*raq*	112.3	101.5	10.6

Table 8: Land Price Index on moving bases for the second half of 2022

Regions	2nd half 2022	1st half 2022	Change rate %
Erbil	101.4	105.6	-4.0
Sulaymaniyah	101.9	105.1	-3.0
Dohuk	99.1	123.0	-19.4
Kurdistan region	100.8	111.2	-9.4
Central governorates	106.7	114.9	-7.1
Southern governorates	107.2	110.9	-3.3
Iraq	106.0	112.3	-5.6

Table 9 : Annual Land Price Index on moving bases for the year 2022

Governorate	2022	2021	Rate of change %
Erbil	103.5	112.2	-7.8
Sulaymaniyah	103.5	107.5	-3.7
Duhok	110.4	99.4	11.1
Kurdistan Region	105.9	106.4	-0.5
Central governorates	110.7	106.1	4.3
Southern governorates	109.0	101.1	7.8
Iraq	109.1	103.7	5.2

Residential sector Price Index in Kurdistan Region for 2022 on **rolling base** (Period-on-Period Bases)

1) For the first half of 2022, on moving bases (period-on-period bases), residential sector price index reached 103.0 in Kurdistan region showing an increase of 0.6% compared to the second half of 2021.

2) For the second half of 2022, residential sector price index reached 102.2 on a moving bases showing a decrease of 0.8% compared to the first half of 2022.

3) in 2022, residential sector price index accounting for 106.2, showing a decrease of 4.7% compared to 2021.

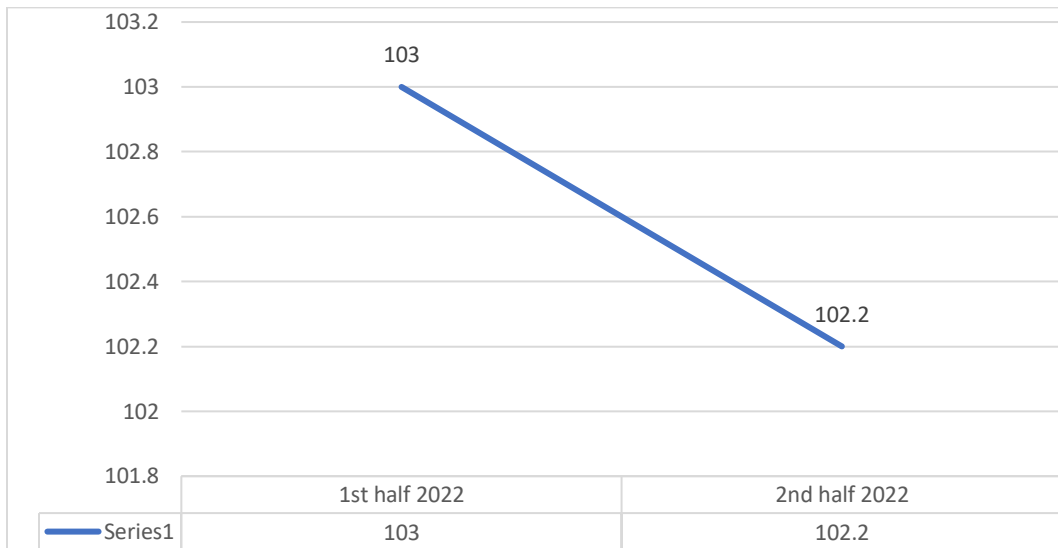*Figure 10: Trend of Residential Price Index in Kurdistan Region on moving bases*

	1st half 2022	2nd half 2022
Series1	103	102.2

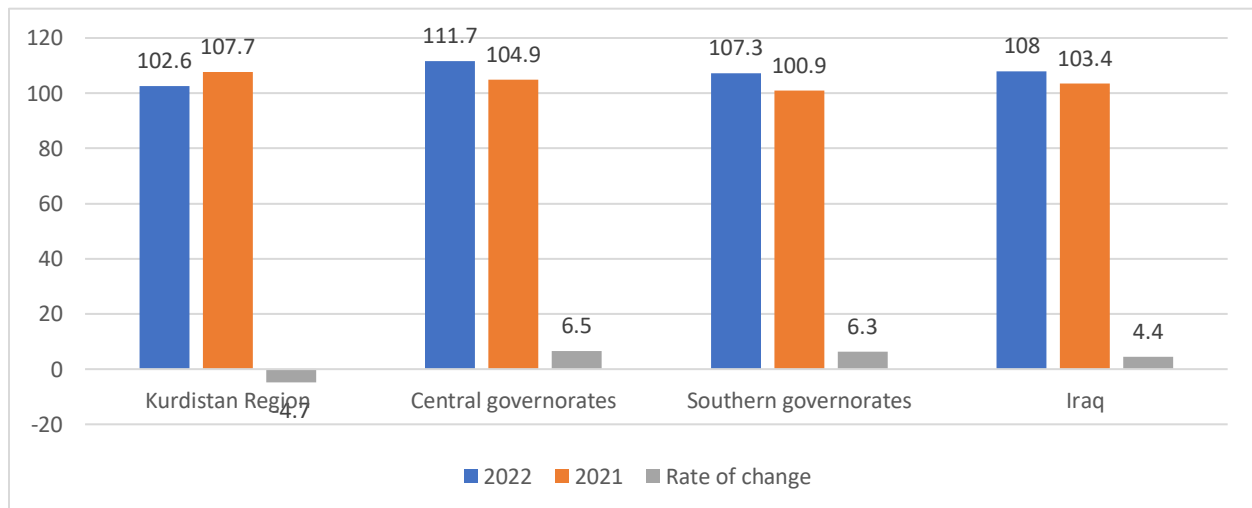*Figure 8 : land price index and annual percentage change in governorates of Kurdistan Region in 2022 and 2021 on Moving base*

	2022	2021	Rate of change
Kurdistan Region	102.6	107.7	-4.7
Central governorates	111.7	104.9	6.5
Southern governorates	107.3	100.9	6.3
Iraq	108	103.4	4.4

Residential sector Price Index in Kurdistan region's governorates in 2022 by moving bases

Erbil Governorate

1) For the first half of 2022, residential sector price index recorded 111.6 representing an increase of 10.1% compared to the second half of 2021.

2) For the second half 2022, residential sector price index on moving bases reached 101.9 showing a decrease by 8.7% compared to the first half of 2022.

3) Totally, residential sector price index in 2022 was recorded at 106.6, showing a decrease by 4.7% compared to 2021.

Sulaymaniyah Governorate

1) For the first half of 2022, residential sector price index recorded 84.9 representing a decrease of 13.8% compared to the second half of 2021.

2) For the second half 2022, on moving bases, residential sector price index reached 99.1 showing an increase of 16.7% compared to the first half of 2022.

3) in 2022, residential sector price index was recorded at 91.7 showing a decrease of 14.2% compared to 2021. showing an increase of 16.7% compared to the first half of 2022.

Duhok Governorate

1) For the first half of 2022, residential sector price index recorded 112.5 in Duhok governorate representing an increase of 4.9% compared to the second half of 2021.

2) For the second half 2022, on moving bases, residential sector price index reached 105.5 in Duhok governorate showing a decrease of 6.2% compared to the first half of 2022.

3) in 2022, residential sector price index 109.0 showing a decrease of 5.1% compared to the first half of 2022.

Figure 9 : Residential Price index and annual percentage change on Moving bases in Kurdistan Region's governorates in 2022
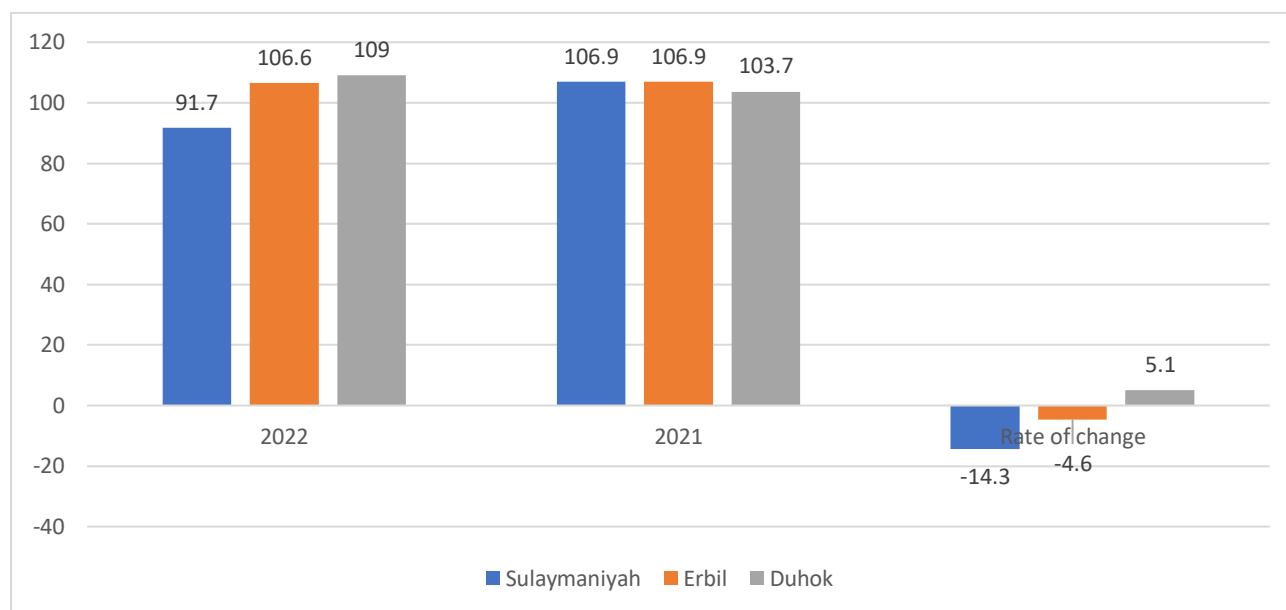

Table 10: Residential sector Price Index on moving bases for the first half of 2022

Regions	1st half 2022	2nd half 2021	Changes rate %
Erbil	111.6	101.4	10.1
Sulaymaniyah	84.9	98.5	-13.8
Duhok	112.5	107.2	4.9
Kurdistan Region	103.0	102.4	0.6
Central governorates	116.3	101.0	15.1
Southern governorates	110.5	101.2	9.2
Iraq	111.2	101.4	9.7

Table 11: Residential sector Price Index on moving bases for the second half of 2022

Regions	2nd half 2022	1st half 2022	Changes rate %
Erbil	101.9	111.6	-8.7
Sulaymaniyah	99.1	84.9	16.7
Duhok	105.5	112.5	-6.2
Kurdistan Region	102.2	103.0	-0.8
Central governorates	107.2	116.3	-7.8
Southern governorates	104.2	110.5	-5.7
Iraq	104.9	111.2	-5.7

Table 12: Annual land price index on moving bases for the year 2022

Governorate	2022	2021	Rate of change%
Erbil	106.6	111.8	-4.7
Sulaymaniyah	91.7	106.9	-14.2
Duhok	109.0	103.7	5.1
Kurdistan Region	102.6	107.7	-4.7
Central governorates	111.7	104.9	6.5
Southern governorates	107.3	100.9	6.3
Iraq	108.0	103.4	4.4