

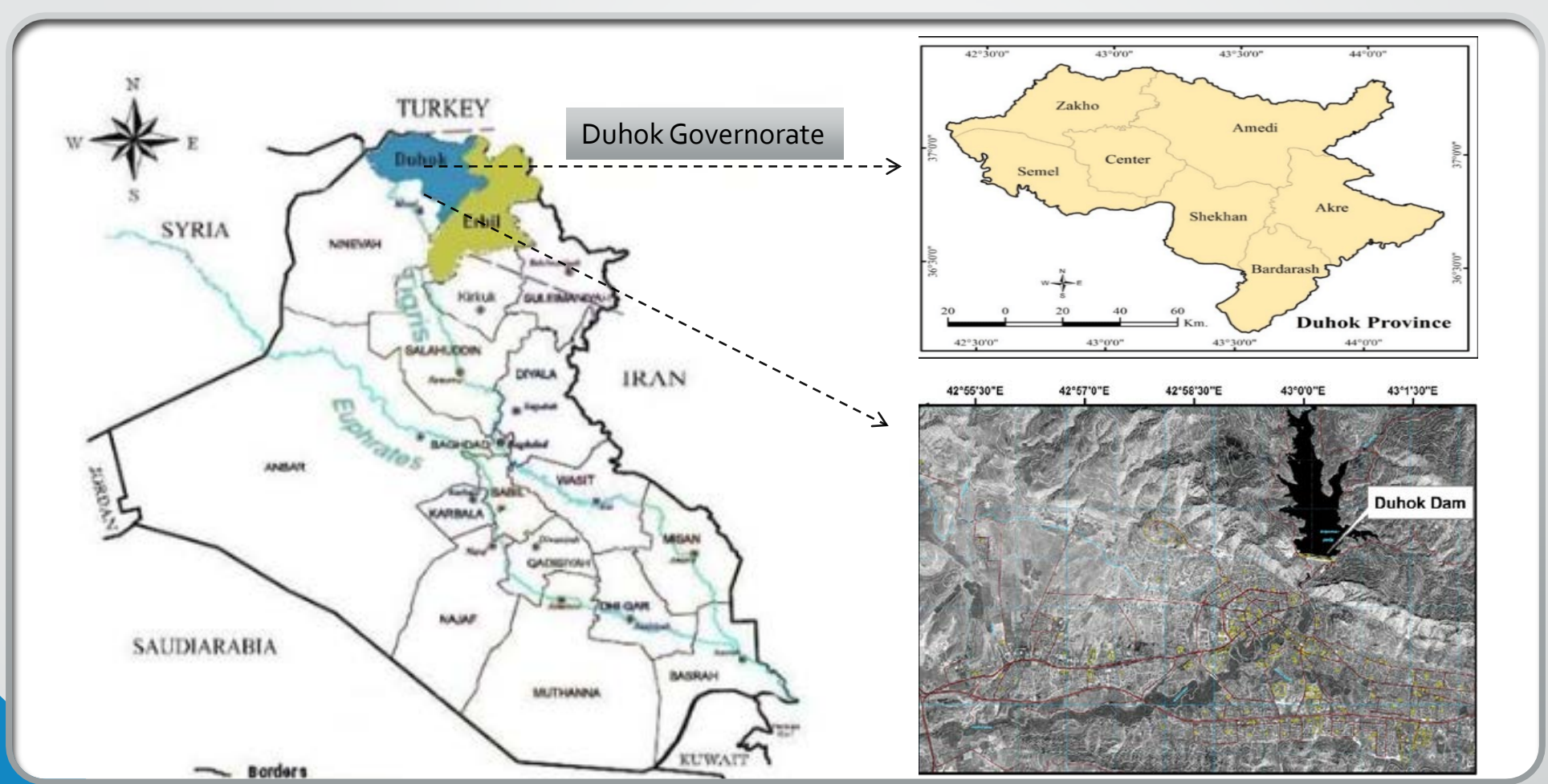
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Duhok Governorate

Kurdistan Region-Iraq

April 14, 2022



Duhok Governorate was found on May 27, 1969, and its center is the city of Duhok, the governorate is considered as one of the traditional and old ancient with many ancient and historical sites that goes across the history.

Overall Size of Duhok:4289000 dunam



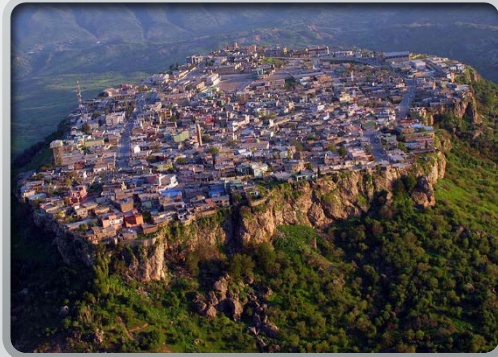
- Duhok governorate is a together living place for all ethnicities and races regardless to their believes or ideologies and has become a shelter and safe heaven for (100 plus thousands of refugees from Rojava (West Kurdistan) as well as IDPs from Sinjar, Mosel and other Iraqi cities. The people of Duhok city are well-known with their bravery and generosity and it is beautiful nature has made it become a distinctive touristic destination for the people who come from various Iraqi cities and spend times in it is pretty resorts. Dahuk is one of the vital cities for its geographical location as well as history.
- A countless number of historical sites can prove that mostly in the hills and inside ancient caves. Moreover, the strategic location that combines three countries together can also prove that for instance a pipeline from kirkuk to Turkey passes through the Governorate, also shows the vital role and the importance of it.
- Based on to the latest statistics, the population of Duhok is nearly 1,648,000 (one million six hundred forty-eight thousand), that includes Kurds, Assyrians, Yazidis, Chaldeans, Armenians, Turkmen, Arabs, and a number of Sabeans and Bahais. And the conmen Kurmanji dialect is the main spoken among the people.

- **Duhok Governorate is divided into 7 districts and 24 sub-districts:**
- Dohuk District
- Amedi District
- Sumel District
- Zakho District:in northwestern Duhok (officially became the Kurdistan Region's fourth independent administration on Monday (September 20, 2021)
- Akre District
- Sheikhan District
- Bardarash District.
- The Batufa District, which will be soon declared.

- The municipality of Duhok was first found in 1935.

And in March 17, 1937, Duhok Water Project was established.

And in 1941-1942, Duhok was a big village, with a population of 300,000 back then. (three hundred thousand) In the years of 1952-1953, the mobail electricity power station was established through generators.



- **Based on the statistics** that were collected in 2021, (there have been 132 hotel resorts and in 2015 there have been 1409 restaurants, and the number of the religious sites, including 1233 mosques, 110 churches, and 249 temples for the Yazidis)

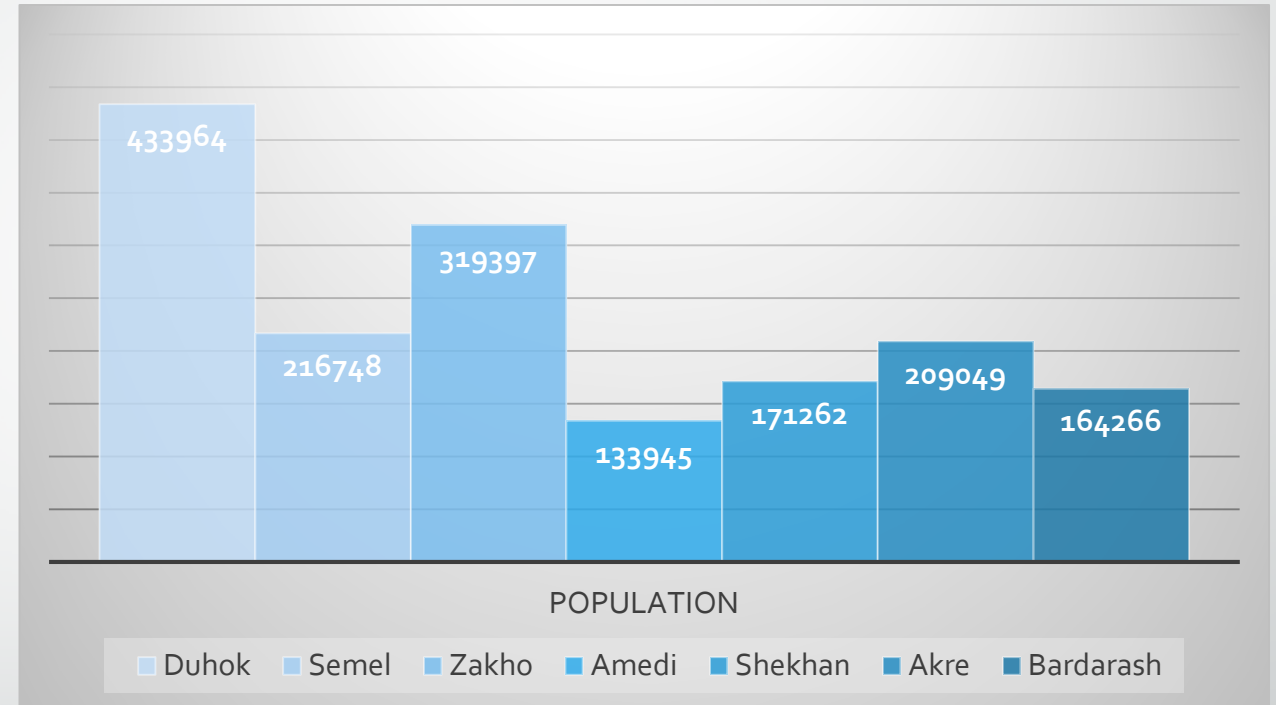
- **The number of the religious sites, including :**

- 1233 mosques,
- 110 churches,
- and 249 temples for the Yazidis)



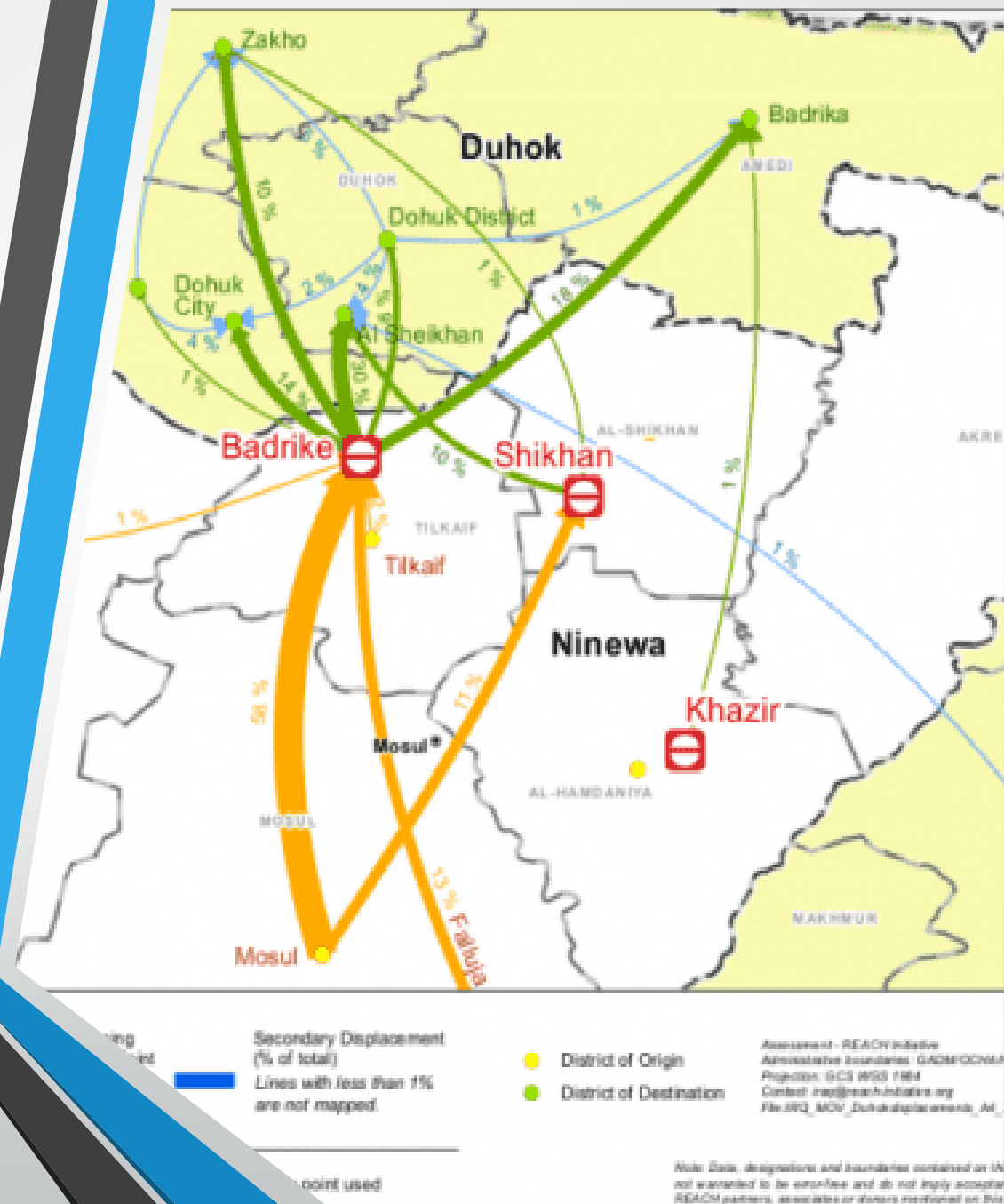
- Population of 7 districts in Duhok Governorate :

The districts of Duhok governorate	Population
Duhok	433964
Semel	216748
Zakho	319397
Amedi	133945
Shekhan	171262
Akre	209049
Bardarash	164266
Total	1648631



Strategically :

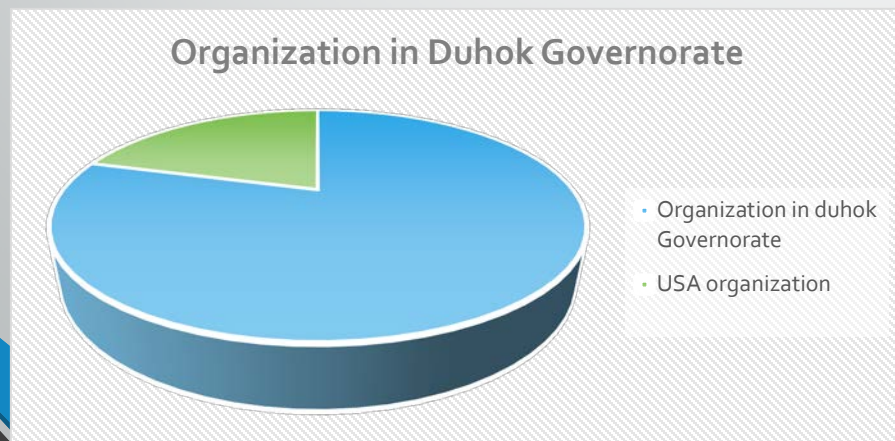
Duhok governorate share the border with Turkey that play a great strategic and economic role for Iraq and the Kurdistan Region. It is a port of entry through Ibrahim Khalil passage, where hundreds of thousands of the Iraqi and Middle eastern imports/exports passes though. In addition, Cihan pipeline between Kirkuk and Turkey passes through the Duhok governorate.



20 Camps are in Duhok Governorate
15 IDPS Camps 5 Refugees Camps

The number of Internal Displaced Persons in Duhok:	Families	Individuals
Total IDPs in Duhok Governorate	89,341	455,408
IDPs returnees	Families	Individuals
Total IDPs returnees in Duhok Governorate	10,698	54,448
Refugees population	Families	Individuals
Total Refugees in Duhok Governorate	19,758	90,528

Regarding the INGOs and local NGOs who play role in Duhok governorate mainly in camps are (169), (44) of these organizations are USA.



- **From the agriculture point of view**, in the past, due to having a suitable soil for **agriculture** the residents of Duhok used to earn and animal husbandry, therefore.. the residents of Duhok used to earn their livelihood by growing crops and relying on agriculture and animal husbandry due to having suitable soil for agriculture, therefore it was identified to be (Iraqi food basket) back then. But currently a days, the majority of the people of Duhok lives in the city center and perform jobs and duties either in the governmental corporations or the private companies.

- **From the geographic point of view**, the city of Duhok is surrounded by a series of mountains from three directions. The White Mountain lies to the north, Zawa Mountain lies to the south, Mam Sin to the east, whereas to the west there is the Sumel agricultural plain.





Agricultural Sector and Water Resources:

Overall Size of Duhok:4289000

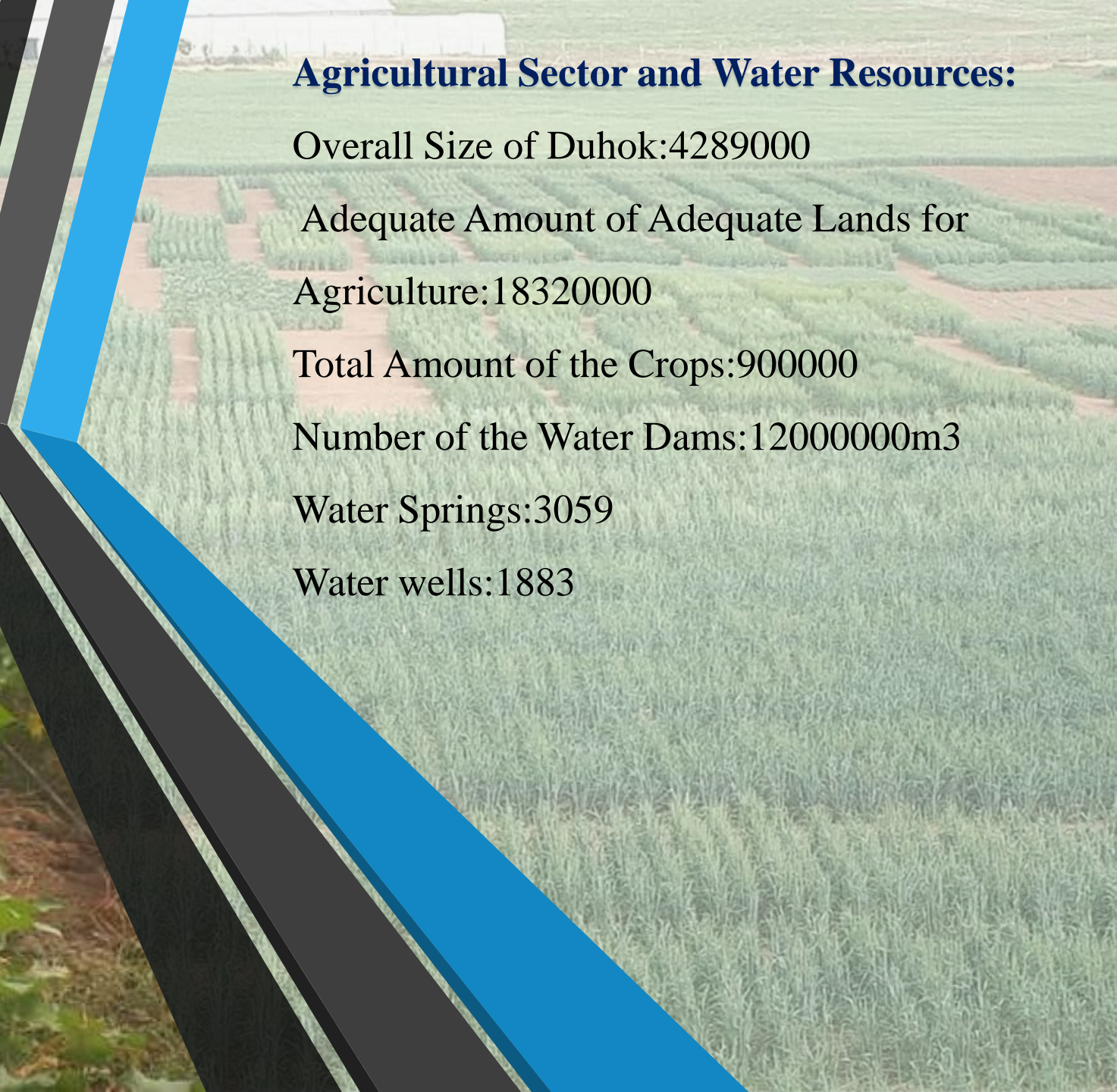
Adequate Amount of Adequate Lands for
Agriculture:18320000

Total Amount of the Crops:900000

Number of the Water Dams:12000000m3

Water Springs:3059

Water wells:1883



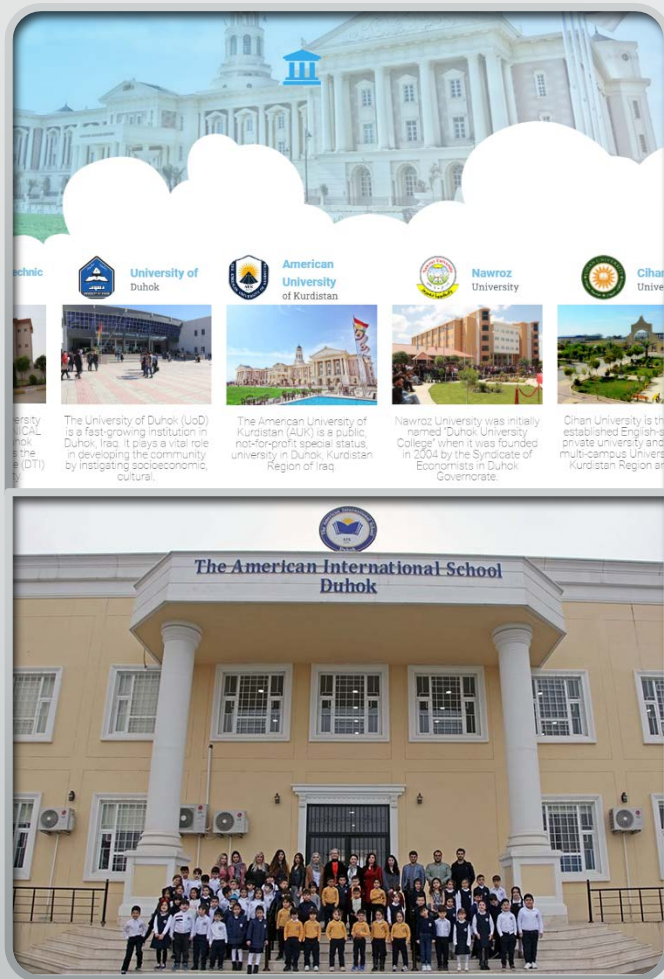


- **When it comes to tourism**, Duhok Governorate is the richest Iraqi Kurdistan Region City for the touristic resorts. It has many natural, religious, social, archeological, and modern resources. However, the Governorate also has touristic service such as residency, accommodations, restaurants, bars, and recreational parks. Moreover, there are other extra services that are provided ,nevertheless these services and resorts have not been put into the peak of their potentials not to mentions there are many challenges that hinder the development of the tourism therefore, it needs better planning and strategies .The Department of Tourism in the Governorate has built a strategy that will lead into the propriety of the tourism in the Governorate as well as the Regional government has listed the tourism among their top priorities in order to improve the tourism in the whole region

Archaeological Sector:

From an Archaeological point of view, Among the archaeological sites in the governorate, Charstin Cave that is located in a mountain in Duhok Dam area. And based on legit sources of historians and researchers, it is ought to be known as the oldest cave in which humans lived. And the Assyrian (Maalathaya) sculptures of King Sennacherib, which were discovered in 1845. And the Qabhan School in the Amadiyah district, that is about 70 km far from the Duhok city center.





Education Sector:

From an educational point of view, in 1894 there were 11 primary schools in Dohuk for teaching kids and educating them, and in 1928 the first primary school for girls was opened, when the whole rest of Iraq had 5 female schools.

District of Duhok	kindergarten	Primary School	secondary school
Duhok	18	221	50
Semel	6	156	41
Zakho	4	126	14
Amedi	6	136	28
Shekhan	11	235	37
Akre	7	126	30
Bardarash	8	179	37

The number of Kindergarten and primary schools is: 1620

And the number of students is: 497000

The number of colleges is: 56

(Duhok University, Zakho University, DPU University)

(AUK University, Nawroz University, chihan University ...)

And the number of students is: 36752

The Health sector in Duhok has its own share of facilities like:

When it comes to Health sector Duhok has its own share, Directorate General of Health in Duhok is representing all the directorates, hospitals, PHCs in overall Duhok Governorate. A government department that supervises all directorates, hospitals, and specialized and health centers in the governorate. It has three directorates in Aqrah and Zakho, in addition to the main office in the governorate. The directorate aims to create a distinct health system that provides basic health services that are affordable, available, safe, of high quality and high standards based on the practical principles of all citizens in the governorate of duhok with a healthy environment to reach a healthy society. The General Directorate of Health in duhok governorate draws up health policies and develops plans to provide preventive health services (primary health care), curative, rehabilitative and educational services so that they are available to all citizens according to the best standards of quality and fairness in providing good services and compassionate care for patients and preserving the environment.

The statistic provided by DOH:

Health centers (Primary and Specialized): 148

Hospitals: 8

Hospital beds: 1144

Doctors/Health providers: 7781

Clients to PHCs: 1,575,255

Attendees to hospitals: 626,701

Admitted patients: 107,222

Surgical operations: 21,218

Normal deliveries: 36,621

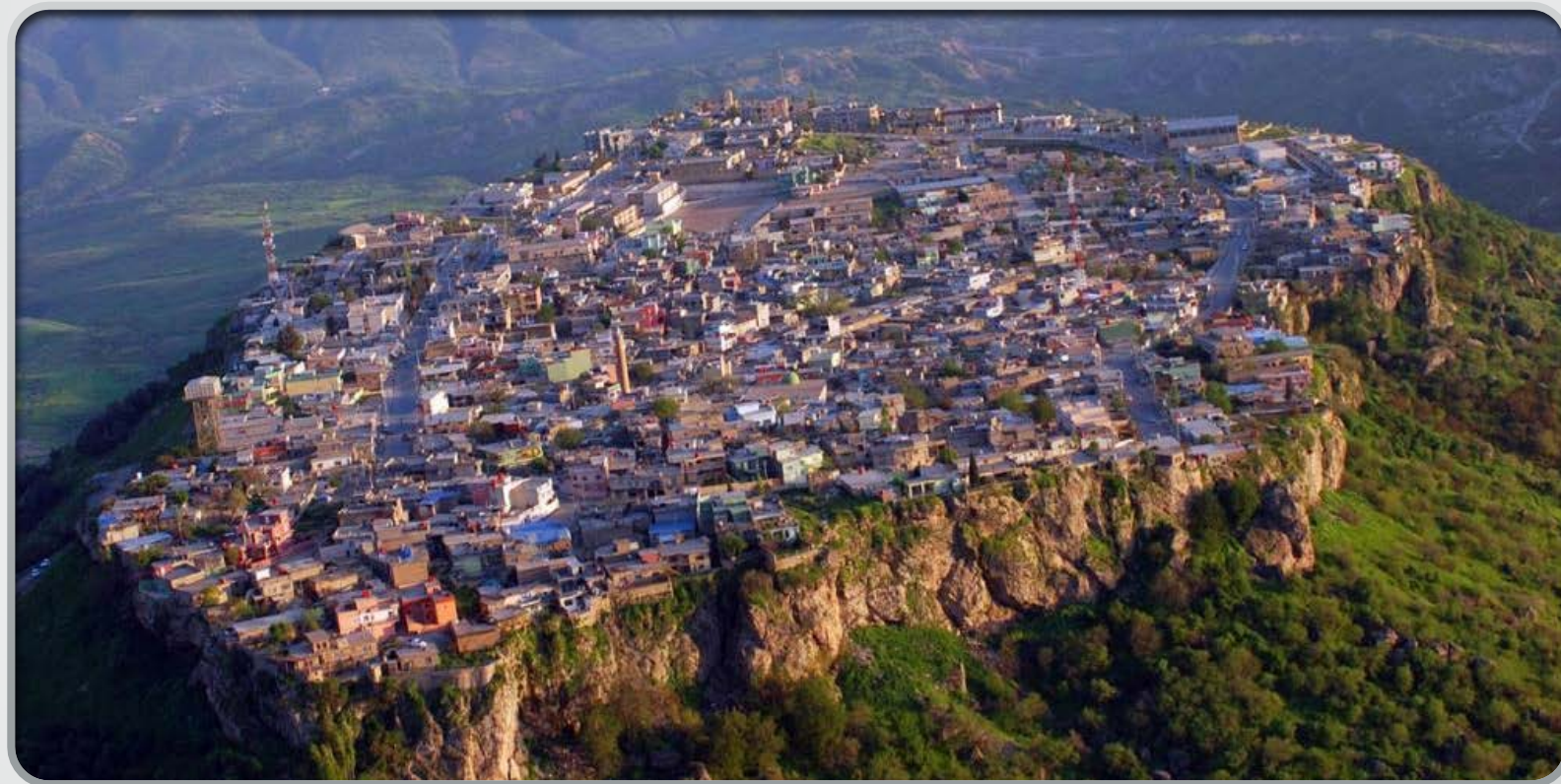
Cesarean sections: 5,156 (12.3%)



Regarding the Chamber of Commerce and Industry:

- Duhok-Chamber was founded in 1978. Started with its activities and opened its gate for trades affiliation in governorate. At the beginning the members of Duhok-Chamber were limited due to the smallness of governorate, other important cause was littleness volume of the commercial activities. After 1991 leaping characteristic quantity to the Duhok-Chamber channel, after phenomenon of the free commercial centers and numerous commercial activities the number of the Duhok Chamber increased also multiple than ever. Duhok Chamber Targets, The objective of the Duhok-Chamber foundation was announced. According to strong desire like any other Chamber all over Iraq. It can also be said there was other objective and should also be mentioned For example:for keeping, organizing and promotion commercial activities.
- Statistics of Duhok Chamber in 2019 :
 - 1- Number of members of the room / 38450
 - 2- Number of registered companies / 3755
 - 3- The number of small and medium industrial projects / 1294
 - 4- Dlala Real Estate & Vehicles Offices /2507
 - 5- Number of businesswomen registered in the Chamber / 158





Thank you



COVID-19 in Duhok:

An overview

April 14, 2022

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Objectives

- To describe COVID-19 hospitals in Duhok.
- To reveal COVID-19 vaccination status in Duhok.
- To determine COVID-19 management guideline in Duhok.

Introduction

- January 3, 2020 until April 5, 2022

Place	COVID-19 cases	Deaths
Duhok	145,987	1,843
Kurdistan	436,532	7,439
Iraq	2,320,526	25,177

<https://covid19.who.int/region/emro/country/iq>
<https://gov.krd/coronavirus-en/dashboard/>

COVID-19 Vaccines

- The DGOH in Duhok has been arranged into 57 COVID-19 vaccination centers.
- Mobile stations operate in short term through targeting special populations
- Three available vaccines: Sinopharm (March 26, 2021), AstraZeneca (April 1, 2021, and Pfizer (April 15, 2021).

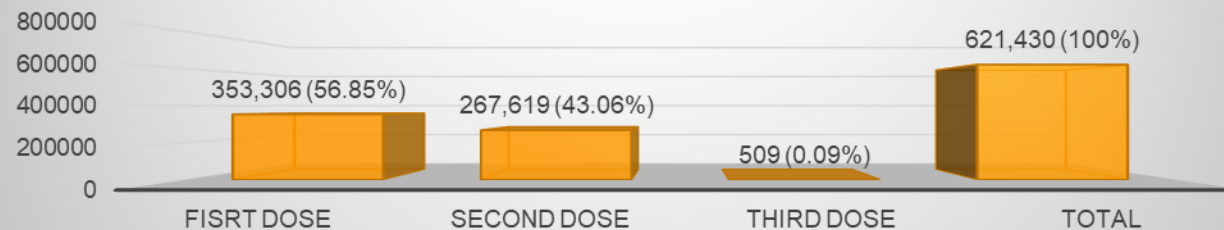
COVID-19 Health Services

- Burn and Plastic Surgery Hospital (Duhok COVID-19 Hospital)
- Azadi Teaching Hospital (ATH)
- Lalav Hospital
- Private sector

COVID-19 Vaccines

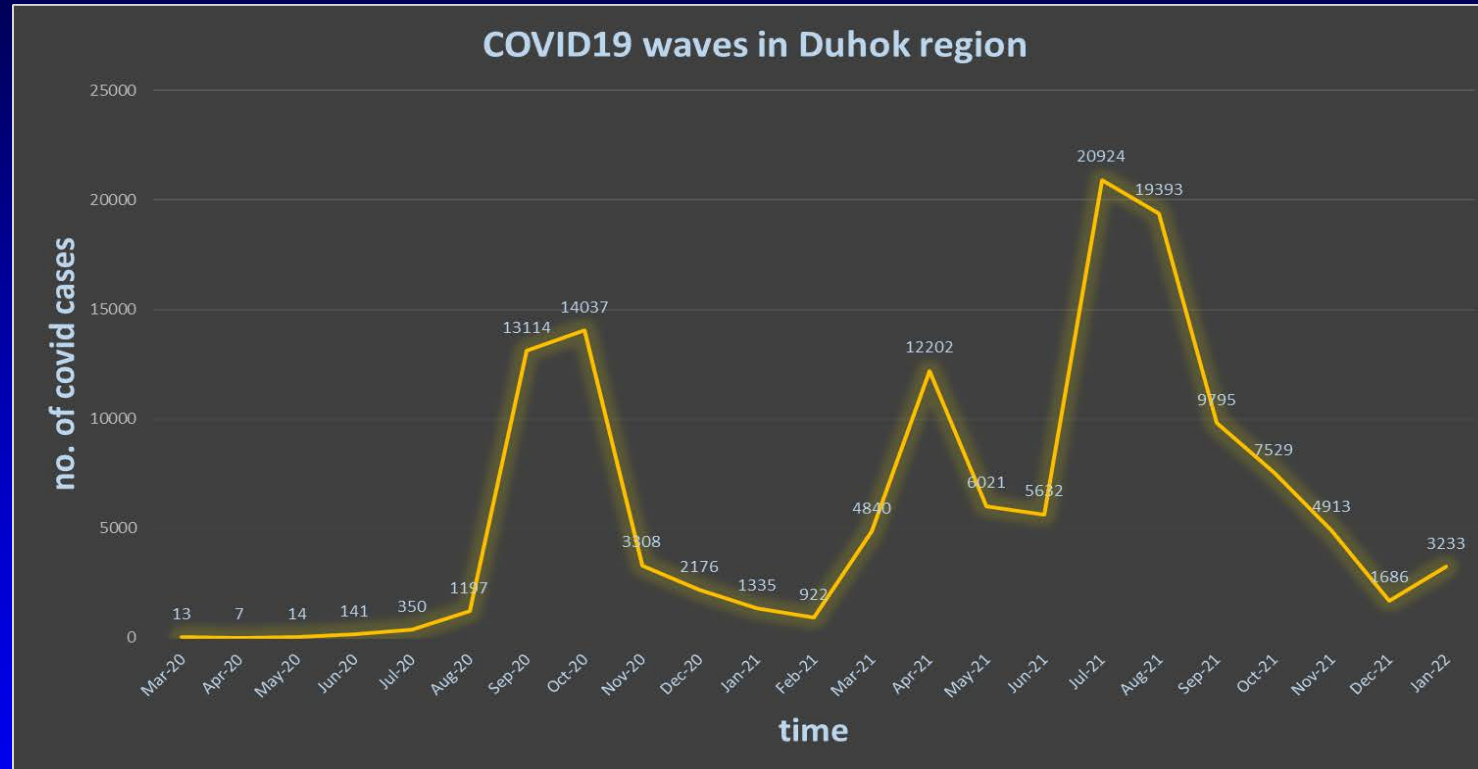
Name	Number	Percentage
Sinopharm	70,770	11.38 %
AstraZeneca	97,459	15.68%
Pfizer	453,201	72.92%
Total	621,430	100%

VACCINATION DOSES BY THE END OF 2021



Number of vaccines according to the dose frequency

COVID-19 Waves



Merza MA, Almufty HB. The Omicron variant is striking Iraqi Kurdistan in January 2022: Would preventive measures contain the new wave? 2022. unpublished work



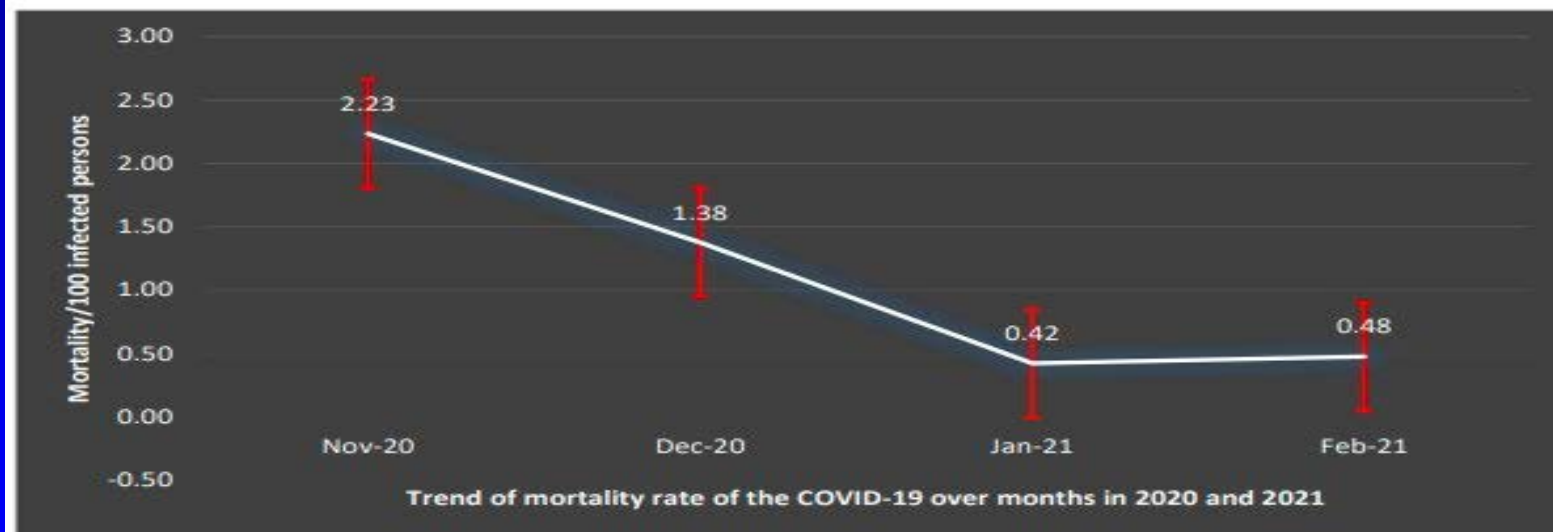
Epidemiological Trends of Coronavirus Disease 2019 in Iraqi Kurdistan

Muayad Aghali Merza et al. Disaster Med Public Health Prep. 2021.

Hide details



> Disaster Med Public Health Prep.
2021 Apr 19:1-6.



Overall, in Iraq, the death rates in the 1st, 2nd, and 3rd waves were 2.15%, 0.58%, and 0.92%, respectively.

The Delta variant was much more severe; however, death rates in the third wave were lower

Table 5: case fatality rate I COVID-19 patients with coexisting disorders and different symptoms

Coexisting disorders (n=15409)	Outcome				P-Value
	Recovered 15104 (98.02%)		Dead 305 (1.98%)		
	With Coexisting disorder	Without Coexisting disorder	With Coexisting disorder	Without Coexisting disorder	
Patients with chronic disease	1936 (96.9)	13168 (98.2)	62 (3.1)	243 (1.8)	<0.001
Patients with Cardiovascular diseases	1099 (95.6)	14005 (98.2)	51 (4.4)	254 (1.8)	<0.001
Patients with Diabetes	804 (96.6)	14300 (98.1)	28 (3.4)	277 (1.9)	0.003
Patients with Chronic lung disease including asthma and COPD, TB	122 (98.4)	14982 (98.0)	2 (1.6)	303 (2.0)	0.769
Patients with Renal Impairment	126 (97.7)	14978 (98.0)	3 (2.3)	302 (2.0)	0.777
Patients with malignancy	31 (93.9)	15073 (98.0)	2 (6.1)	303 (2.0)	0.092
Patients with Immunodeficiency	45 (97.8)	15059 (98.0)	1 (2.2)	304 (2.0)	0.924
Symptoms	With symptom	Without symptom	With symptom	Without symptom	P-Value
Symptom presence	6894 (98.4)	8210 (97.7)	115 (1.6)	190 (2.3)	0.006
Fever	4836 (98.4)	10268 (97.8)	79 (1.6)	226 (2.2)	0.023
Chill and rigors	43 (95.6)	15061 (98.0)	2 (4.4)	303 (2.0)	0.234
Sore throat	2370 (98.2)	12734 (98.0)	44 (1.8)	261 (2.0)	0.547
Cough	3552 (98.3)	11552 (97.9)	63 (1.7)	242 (2.1)	0.243
Shortness of breath	1474 (97.2)	13630 (98.1)	43 (2.8)	262 (1.9)	0.012
Loss of smell and/or taste	2471 (98.3)	12633 (98.0)	44 (1.7)	261 (2.0)	0.366
Loss of appetite	298 (97.4)	14806 (98.0)	8 (2.6)	297 (2.0)	0.421
Malaise	115 (99.1)	14989 (98.0)	1 (0.9)	304 (2.0)	0.386
Fatigue (including feeling weak)	943 (98.6)	14161 (98.0)	13 (1.4)	292 (2.0)	0.156
Nausea and Vomiting	279 (97.9)	14925 (98.0)	6 (2.1)	299 (2.0)	0.878

Merza et al. Clinical and epidemiological characteristics and outcomes of Coronavirus disease-19 patients in a large longitudinal study. International journal of health sciences. 2021 Jul;15(4):29.



original article

COVID-19 outbreak in Iraqi Kurdistan: The first report characterizing epidemiological, clinical, laboratory, and radiological findings of the disease



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ABSTRACT

Introduction: On March 11, 2020, the novel coronavirus was declared a global pandemic. The disease was named COVID-19 standing for coronavirus disease 2019. The objectives were to determine the epidemiological, clinical, laboratory, and radiological characteristics of COVID-19 patients.

Methods: In this prospective descriptive study, 15 confirmed hospitalized cases of COVID-19 between 18th March and April 7, 2020 were followed-up till discharge.

Results: There were 15 reported patients infected by 3 imported index cases from Europe. The mean age of the patients was 28.06 (SD: 16.42 years). The patients' age stratification was as follows: 0–5 (2, 13.3%); 6–18 (2, 13.3%); 19–50 (10, 66.7%), and 51–64 years (1, 6.7%). The patients were male (9, 60.0%) and female (6, 40.0%). Most of the patients had mild disease severity (13, 86.7%), followed by mild-moderate (1, 6.7%) and moderate-severe (1, 6.7%). The study revealed that 6 patients were asymptomatic, and 9 patients were symptomatic. The most common symptoms were: fever (n = 8; 53.3%), cough (n = 7; 46.7%), shortness of breath (n = 3; 20.0%), fatigue (n = 3; 20.0%), and taste and smell disorders (n = 4; 26.7%). All patients were recovered and discharged over a median of 8 between 8 and 21 days. The mean and Std. deviation values of the hematological were: WBC: 6.57 (1.86); neutrophil count: 3.75 (1.26); lymphocyte count: 1.87 (0.41); Hb: 13.89 (1.26); platelet count: 207.67 (52.21).

Conclusion: All COVID-19 cases were linked to foreign visits with few local transmissions to close contacts without community transmission. The majority of cases were mild illnesses with full recovery.

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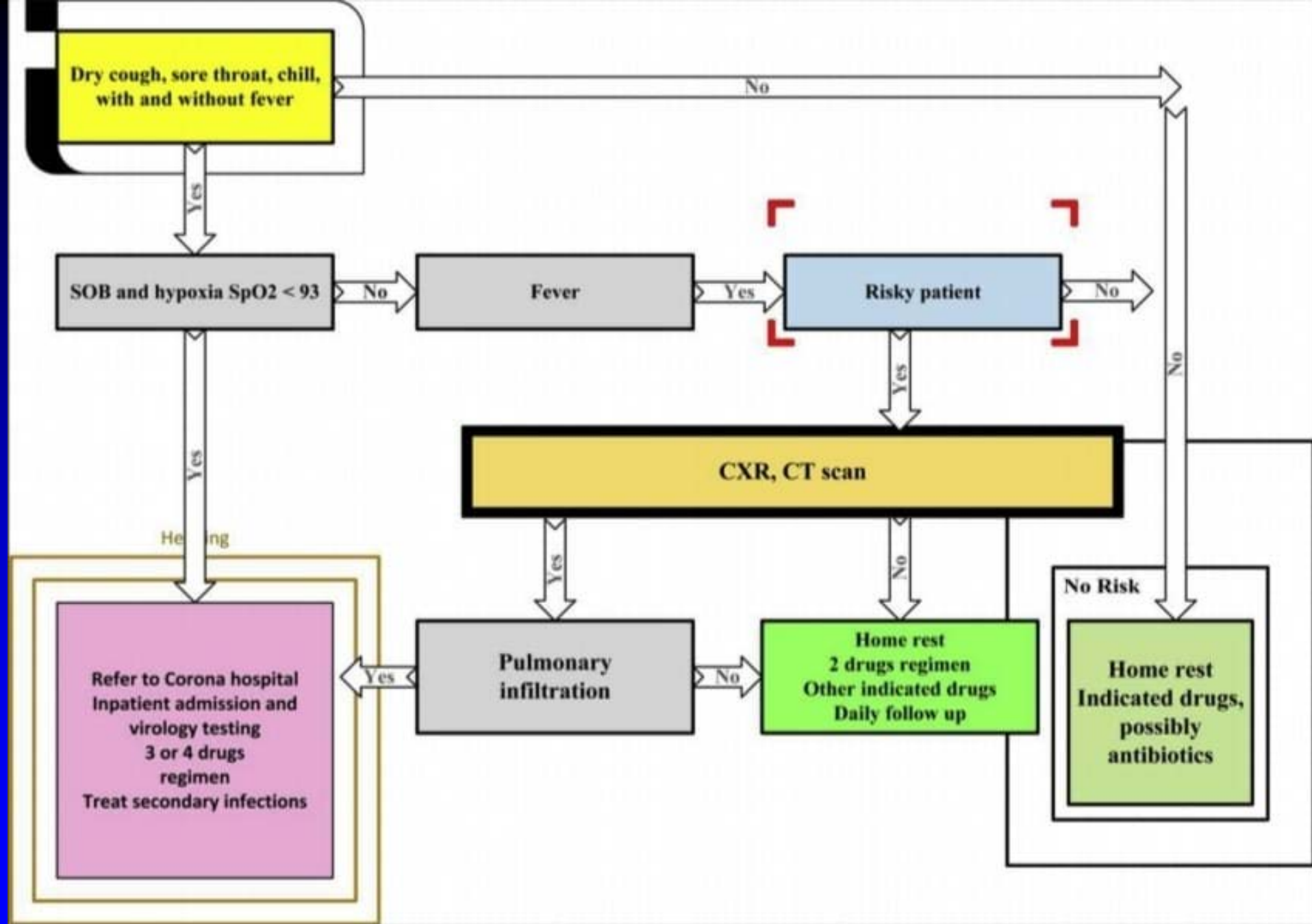


Fig. 1. Schematic guide of managing COVID-19 patients [designed by Dr. Muayad A. Merza].

Conclusion

- Despite limited healthcare resources, management of confirmed COVID-19 patients in Duhok is reasonable.
- The case mortality rate is in parallel with international standards.
- There are missing essential medicines for managing COVID-19 cases e.g. monoclonal antibodies and recently authorized antivirals.
- The average vaccination coverage is below the WHO standard; hence urgent action is indicated to increase the coverage rate and to expand the vaccines into including 5-11 years old.



University of Duhok
UoD

University of Duhok

- UOD is established on October 31st, 1992 with two colleges and 149 students.

- 19 Colleges
- 67 Departments
- 1 Institute
- 22,942 Undergraduate, 53 % females
- 1827 Academic staff, 35% females
- 2527 Administrative staff, 35% females
- 837 Postgraduate, 42% females



Vision

We envision being a world class university that heralds positive social environmental, technological and economic transformation in the Duhok Governorate, Kurdistan Region, Iraq and the world at large.

Mission

Our mission is to support the economic, social, cultural and environmental development in the Duhok Governorate, Kurdistan Region and Iraq through the continuous supply of quality graduates and quality research in different specializations.

Colleges of UOD

- College of Medicine
- College of Agriculture
- College of Engineering
- College of Humanity Sciences
- College of Veterinary Medicine
- College of Administration and Economics
- College of Law and Political Sciences
- College of Science
- College of Basic Education
- College of Physical education
- College of Spatial Planning
- College of Nursing
- College of Pharmacy
- College of Dentistry
- College of Education
- College of Health Sciences
- College of Basic Education / Amedy
- College of Languages
- College of Political Science



Academic Centers

- Scientific Research Centre in each College
- Beshkchi Center
- Center for Peace and Conflict Resolution Studies
- Faculty Development Center
- Career Development Center CDC
- Central Library and American Corner
- Research and Consulting Center for Planning
- Erasmus Plus Center
- E-learning Center
- Training and Learning Center
- Institutional Research Center (IRC) Center
- Genocide Center
- COVID-19 testing Center



THANKYOU