ANALYSIS OF THE
AGRICULTURE IN KZ

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01 DATA COLLECTION

HOW WE COLLECTED DATASET?

1. Download a xslx file from spreadsheet section here <u>Bureau of National Statistics</u>.

📊 Основные показатели развития животноводства в Республике Казахстан (январь-август 2023г)   332.5 Кб, xls

2. Data cleaning: remove sheets without tables, delete first line with name of table and rename the sheet according to table's name.

02 DASHBOARD

OVERVIEW PAGE

Using the buttons that have an **hover** effect, you can navigate to the desired pages

THERE ARE 5 SECTIONS ON THE MAIN PAGE, WHICH WILL BE FURTHER ANALYZED IN THE FRAMEWORK OF 2022 AND 2023:

- Livestock & poultry production
- Cow's milk production
- Eggs production
- Large skins production
- Small skins production
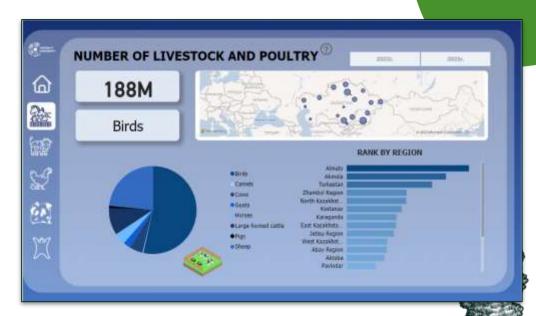
THE CARDS SHOW THE TOTAL VALUES FOR TWO YEARS

STACKED COLUMN CHARTS DISPLAY THE LEADING TYPE OF LIVESTOCK & POULTRY AND REGIONS OF OUR COUNTRY

LIVESTOCK AND POULTRY

VISUALIZATIONS:

- **Slicer** with style "tile" that filters data of Number of livestock and poultry by years (2022/2023).
- **Card** that display summary statistics and highlight important metric such as number of animals/birds in both years.
- **Bubble map** to visualize geographical data (Regions of Kazakhstan) with values represented by the size of bubbles.
- **Clustered bar chart** for Regions with livestock and poultry number values involves visualizing data where regions are compared based on the contents of the livestock and poultry.
- **Pie chart,** where slices represent the percentage distribution of number of livestock and poultry across the regions for each year.
- **"Help" button** and **Popup window** with additional information about production.

NUMBER OF LIVESTOCK AND POULTRY ⑦

Slicer

2022г.	2023г.
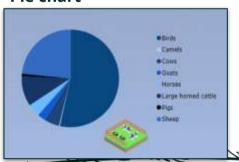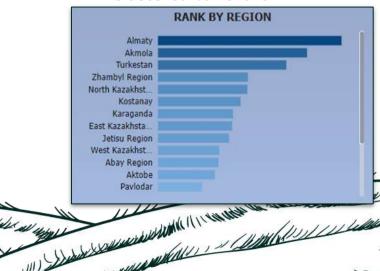
Popup window

The production of livestock and poultry involves raising animals for various purposes, including meat, dairy, eggs, and other byproducts. The data is calculated per head of cattle.

X

Cards

188M

Birds

Bubble map

Pie chart

- Birds
- Camels
- Cows
- Goats
- Horses
- Large horned cattle
- Pigs
- Sheep

Clustered bar chart

RANK BY REGION

Region
Almaty
Akmola
Turkestan
Zhambyl Region
North Kazakhst...
Kostanay
Karaganda
East Kazakhsta...
Jetisu Region
West Kazakhst...
Abay Region
Aktobe
Pavlodar

MILK PRODUCTION

VISUALIZATIONS:

- **Slicer** with style "tile" that filters data of Cow's milk production by years (2022/2023).
- **Card** that display summary statistics and highlight important metric such as tons of milk in both years.
- **Bubble map** to visualize geographical data (Regions of Kazakhstan) with values represented by the size of bubbles.
- **Clustered bar chart** for Regions with milk number values involves visualizing data where regions are compared based on the number of milk produced.
- **Clustered column chart** shows in what ratio milk production has changed in different regions in two years.
- **Treemap** displays the relative proportions and relationships between regions and the number of milk production.
- **"Help" button** and **Popup window** with additional information about production.

COW'S MILK PRODUCTION (?)

Slicer
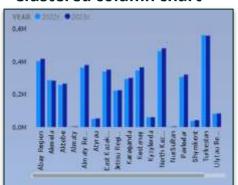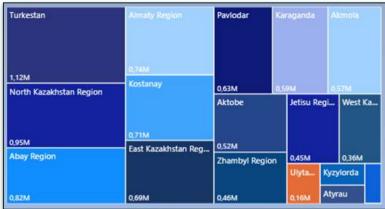
| 2022г. | 2023г. |

Cards

9,07M
TONS OF MILK

Clustered column chart

YEAR ● 2022г. ● 2023г.

Treemap

Turkestan	Almaty Region	Pavlodar	Karaganda	Akmola
1,12M	0,74M	0,63M	0,59M	0,57M
North Kazakhstan Region	Kostanay	Aktobe	Jetisu Regi...	West Ka...
0,95M	0,71M	0,52M	0,45M	0,36M
Abay Region	East Kazakhstan Reg...	Zhambyl Region	Ulyta... Kyzylorda
0,82M	0,69M	0,46M	0,16M Atyrau

Clustered bar chart

RANK BY REGION

Turkestan
North Kazakhs...
Abay Region
Almaty Region
Kostanay

Bubble map

КАЗАХСТАН
УЗБЕКИСТАН КИРГИЗИЯ
ТАДЖИКИСТАН

Popup window

Cow's milk production is a significant component of the dairy industry and plays a crucial role in providing milk and dairy products. Data is calculated per ton.
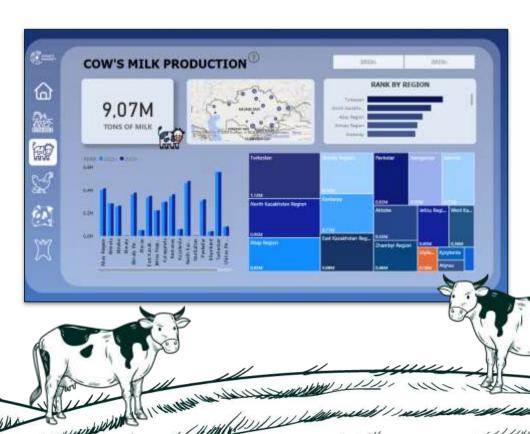
EGG PRODUCTION

VISUALIZATIONS:

- **Slicer** with style "tile" that filters data of Egg Production by years (2022/2023).
- **Card** that display summary statistics and highlight important metric such as number of eggs in both years.
- **Bubble map** to visualize geographical data (Regions of Kazakhstan) with values represented by the size of bubbles.
- **Clustered bar chart** for Regions with egg number values involves visualizing data where regions are compared based on the number of eggs produced.
- **100% Stacked bar chart** the height of each bar represents 100%, and the segments within each bar represent the percentage distribution of egg production across the regions for each year.
- **"Help" button** and **Popup window** with additional information about production.

EGG PRODUCTION ⑦

Slicer and card

2022г.   2023г.

3.40M

EGGS

Map

Clustered bar chart

RANK BY REGION

- North Kazakhstan Region
- Akmola
- Karaganda
- Kostanay
- Almaty Region
- Jetisu Region
- Turkestan
- Aktobe
- Pavlodar
- West Kazakhstan Region
- Zhambyl Region

100% Stacked bar chart

Ratio of two years

● 2022г. ● 2023г.

Region	2022г.	2023г.
Abay Regi...	51.57%	48.43%
Akmola	50.31%	49.69%
Aktobe	50.95%	49.05%
Almaty	61.96%	38.04%
Almaty R...	50.12%	49.88%
Atyrau	78.00%	22.00%
East Kaza...	49.45%	50.55%
Jetisu Re...	50.09%	49.91%
Karaganda	47.62%	52.38%
Kostanay	53.19%	46.81%
Kyzylorda	51.43%	48.57%
Mangystau	51.01%	48.99%
North Kaz...	50.82%	49.18%
NurSultan	58.97%	41.03%
Pavlodar	50.72%	49.28%
Shymkent	45.43%	54.57%
Turkestan	50.31%	49.69%
Ulytau Re...	59.05%	40.95%
West Kaz...	53.39%	46.61%
Zhambyl ...	52.26%	47.74%

0% 50% 100%

Pop up window

Egg production is an important part of poultry farming and provides a major source of protein for many people around the world. Data calculated by piece.

X

Navigation buttons with hovering effect

VISUALIZATIONS:

- **Slicer** with style "tile" that filters data of Large Skins Production by years (2022/2023).
- **Card** that display summary statistics and highlight important metric such as number of Large Skins in both years.
- **Bubble map** to visualize geographical data (Regions of Kazakhstan) with values represented by the size of bubbles.
- **Clustered bar chart** for Regions with Skins number values involves visualizing data where regions are compared based on the number of Skins produced.
- **Stacked area chart** display the production of skins in different regions for two years, with each region represented as a colored area.
- **Treemap** to represent regions and their skin production can be a visually appealing way to display hierarchical data.
- **"Help" button** and **Popup window** with additional information about production.

LARGE SKINS PRODUCTION

PRODUCTION OF LARGE SKINS

Slicer and card

2022г.	2023г.

4M
LARGE SKIN

Clustered bar chart

RANK BY REGION

- Turkestan
- Aktobe
- Almaty Region
- Abay Region
- Jetisu Region

Stacked area chart

0.5M

0.0M

Abay · Akmola · Aktobe · Almaty · Alm at... · Atyrau · East K... · Jetisu ... · Karag... · Kosta... · Kyzylo... · Mang... · North ... · NurSu... · Pavlod... · Shym... · Turkes...

Treemap

Turkestan 522K	Abay Region 370K	Pavlodar 240K	East Kaz... 225K	Akmola 209K
Aktobe 420K	Jetisu Region 256K	Zhambyl Re... 188K	Kostanay 168K	Uly... 100K
Almaty Region 391K	Karaganda 248K		North Kazak... 183K	
	West Kazakhstan Region 243K		Kyzylo... 90K	

Bubble map

Popup window

Large Animal Skins: These skins come from larger animals such as cattle, buffalo, horses, and elephants. They are generally much larger in size compared to small animal skins.

X

SMALL SKINS PRODUCTION

VISUALIZATIONS:

- **Slicer** with style "tile" that filters data of Small Skins Production by years (2022/2023).
- **Card** that display summary statistics and highlight important metric such as number of Small Skins in both years.
- **Bubble map** to visualize geographical data (Regions of Kazakhstan) with values represented by the size of bubbles.
- **Clustered bar chart** for Regions with skins number values involves visualizing data where regions are compared based on the number of skins produced.
- **Table** to display year and number of small skins in a tabular format with additional icons formatting.
- **Stacked bar chart** display each region as a separate bar, and within each bar, the two years will be stacked to show the change in the number of small skins over time.
- **"Help" button** and **Popup window** with additional information about production.

PRODUCTION OF SMALL SKINS

Slicer and card

2022г.	2023г.

9M

SMALL SKINS
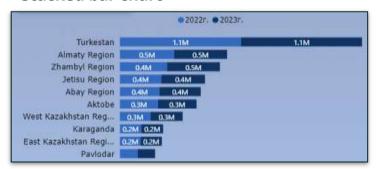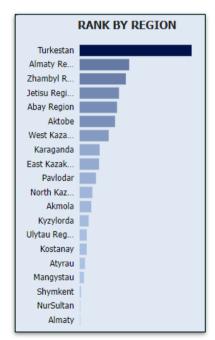
Table

Year		Value
2023г. ↑		8988464
2022г. ↓		8813814
Total		**17802278**

Clustered bar chart

RANK BY REGION

- Turkestan
- Almaty Re...
- Zhambyl R...
- Jetisu Regi...
- Abay Region
- Aktobe
- West Kaza...
- Karaganda
- East Kazak...
- Pavlodar
- North Kaz...
- Akmola
- Kyzylorda
- Ulytau Reg...
- Kostanay
- Atyrau
- Mangystau
- Shymkent
- NurSultan
- Almaty

Popup window

Small Animal Skins: These skins are obtained from smaller animals like rabbits, goats, sheep, and reptiles. They are typically smaller in size compared to large animal skins.

X

Bubble map

Stacked bar chart

● 2022г. ● 2023г.

Region	2022	2023
Turkestan	1.1M	1.1M
Almaty Region	0.5M	0.5M
Zhambyl Region	0.4M	0.5M
Jetisu Region	0.4M	0.4M
Abay Region	0.4M	0.4M
Aktobe	0.3M	0.3M
West Kazakhstan Reg...	0.3M	0.3M
Karaganda	0.2M	0.2M
East Kazakhstan Regi...	0.2M	0.2M
Pavlodar		

02 CONCLUSION

AGRICULTURE STATISTICS FOR 2022

Top regions of the Republic of Kazakhstan

14M — **NUMBER OF LIVESTOCK AND POULTRY**
Almaty

561K — **COW'S MILK PRODUCTION**
Turkestan

499K — **EGG PRODUCTION**
North Kazakhstan Region

1M — **PRODUCTION OF SMALL SKINS**
Turkestan

254K — **PRODUCTION OF LARGE SKINS**
Turkestan

AGRICULTURE STATISTICS FOR 2023

Top regions of the Republic of Kazakhstan

13M — **NUMBER OF LIVESTOCK AND POULTRY**
Almaty

558K — **COW'S MILK PRODUCTION**
Turkestan

490K — **EGG PRODUCTION**
Akmola

1M — **PRODUCTION OF SMALL SKINS**
Turkestan

267K — **PRODUCTION OF LARGE SKINS**
Turkestan

CONCLUSION

In summary, the agricultural sector in Kazakhstan during the 2022-2023 period exhibited a mix of growth and stability across various subsectors. **Livestock and poultry** saw positive growth, while **milk production** showed a consistent increase. **Egg production** experienced a slight decline, and the **skins industry** remained stable. The leading regions played a crucial role in the country's agriculture, emphasizing the importance of continued investment and support for these areas. It is essential for policymakers and stakeholders in the agricultural sector to monitor these trends and make informed decisions to enhance Kazakhstan's agricultural industry.

THANK YOU!

DOES ANYONE HAVE ANY QUESTIONS?