Jammu & Kashmir UT Analysis

Data Analytics:

Data Analytics is the process of examining data sets in order to find trends and draw conclusions about the information they contain. Data analytics is the science of data.

Data Analysis:

The collection, transformation and organization of data in order to draw conclusions, make predictions and drive informed decision making.

The six steps Data Analysis process are:

- Ask
- Prepare
- Process
- Analyze
- Share
- Act

Ask Phase:

In this phase, we first understand the dataset. The company is a Mechanical core company. We ask about what is the problem they are facing and then records about the districts performance in the past.

Prepare Phase:

In this phase, we collect the required dataset that we are going to find the solution. We store it in excel or some databases or data warehouse. Storing and management of data is very important.

Process Phase:

In this phase, after collecting the required dataset, we must do Data cleaning/Data cleansing, which is very important. While doing data cleaning we can check for null values in the dataset and also we can remove duplicates and inaccuracies in data, so that we can get accurate results.

Analyze Phase:

In this phase, after doing Data cleaning we can start visualizing data to get meaningful insights. We can use different types of graphs or charts to represent the insights in a visual way.

Share Phase:

In this phase after Visualizing the data, then we can share the reports or dashboards that we are created to our stakeholders and we get some ideas about where to improve in our schemes.

Act Phase:

In this phase after getting the meaningful insights from the analyst, we can put that insights in a real time and that helps to improve the districts growth.

Workflow for this task:

- **Data Collection:**

Data collection or data gathering is the process of gathering and measuring information on targeted variables in a establishing system, which then enables one to answer relevant questions and evaluate outcomes. I collected the data from MGNREGA website.

- **Data Visualization:**

After doing the data collection process, then I started doing Data Visualization to get meaningful insights from the data.

I used Power BI Desktop for data visualization.

First I used cards to find the total number of districts, No.of Blocks, No.of GP's, No.of Job Cards, No.of workers in the Jammu & Kashmir. Then used slicers to choose the district we want to know the analysis.
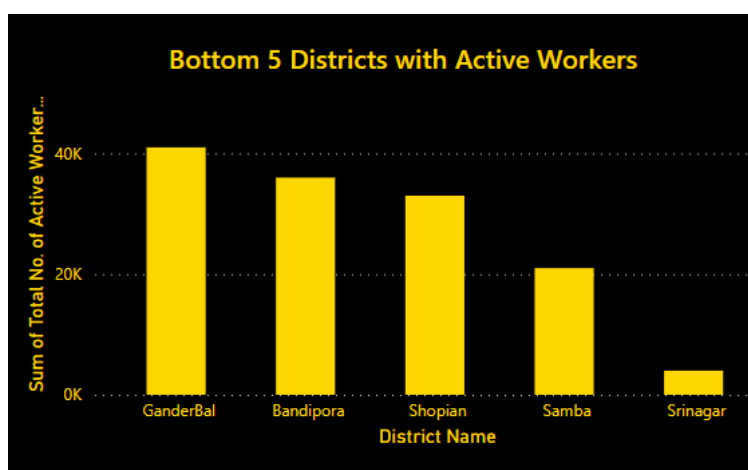
District Count	District	Total no.of Blocks	Total no.of GP's	No.of Job Cards in Lakhs	No.of Workers in Lakhs
20	All	286	4319	14.08	23.83

INSIGHTS

Top & Bottom 5 Districts with Active Workers:
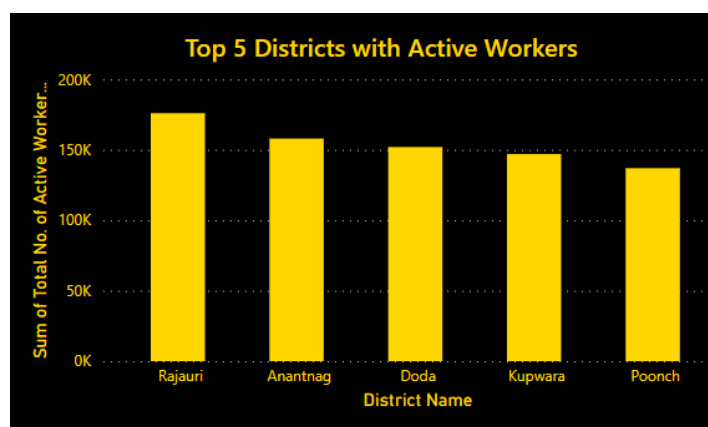
District Name	Active SC Workers
RAJAURI	176000
ANANTNAG	158000
DODA	152000
KUPWARA	147000
POONCH	137000

District Name	Active SC Workers
GANDERBAL	41000
BANDIPORA	36000
SHOPIAN	33000
SAMBA	21000
SRINAGAR	4000

No.of Workers VS No.of Active Workers by District Name:
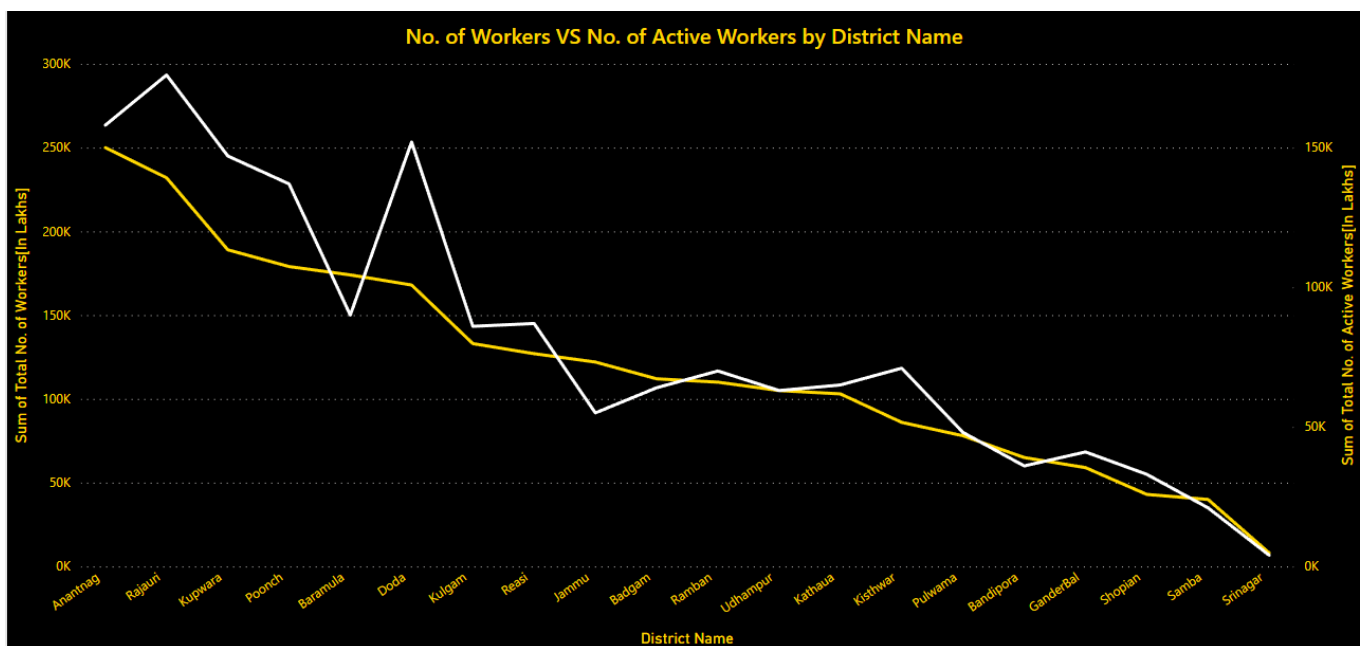
District Name	No.of Workers	No.of Active Workers
Anantnag	250000	158000
Badgam	112000	64000
Bandipora	65000	36000
Baramulla	174000	90000
Doda	168000	152000
Ganderbal	59000	41000
Jammu	122000	55000
Kathaua	103000	65000
Kisthwar	86000	71000

Kulgam	133000	86000
Kupwara	189000	147000
Poonch	179000	137000
Pulwama	78000	48000
Rajauri	232000	176000
Ramban	110000	70000
Reasi	127000	87000
Samba	40000	21000
Shopian	43000	33000
Srinagar	8000	4000
Udhampur	105000	63000

No.of Job Cards issued VS No.of Active Job Cards by District

No. of JobCards issued VS No. of Active Job Cards by District Name
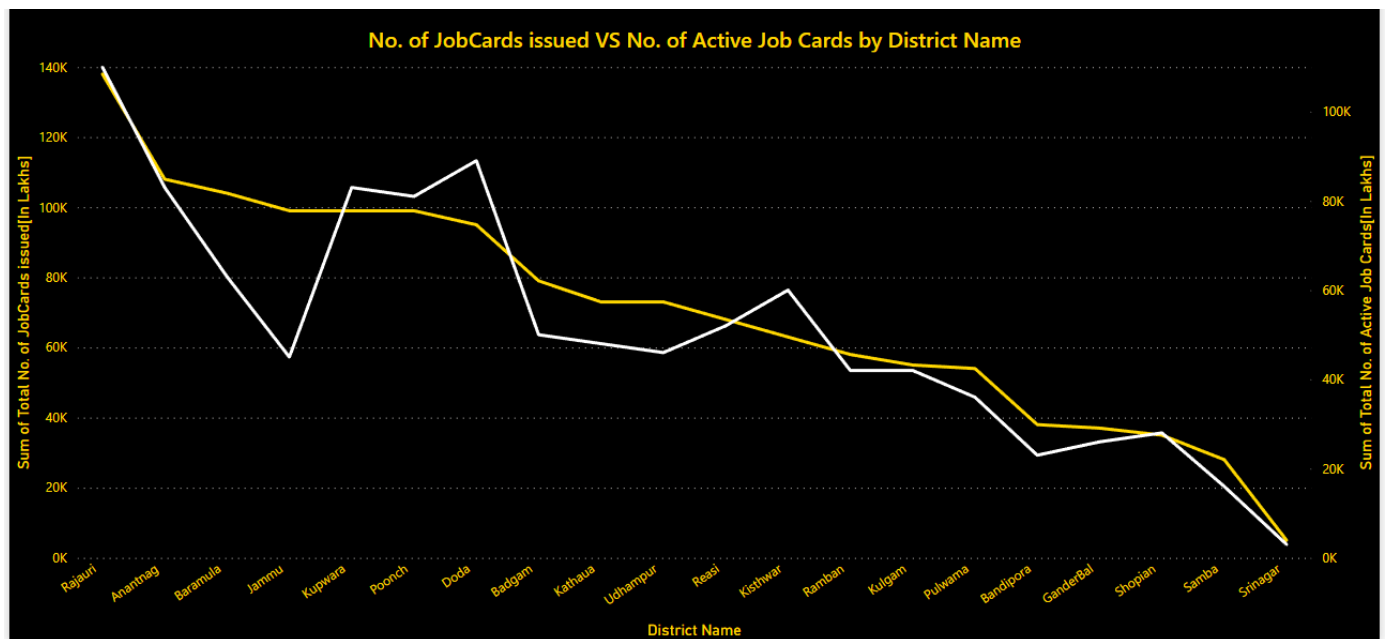
District Name	No.of Job Cards	No.of Active Job Cards
Anantnag	108000	83000
Badgam	79000	50000
Bandipora	38000	23000
Baramulla	104000	63000
Doda	95000	89000

|		
Ganderbal	37000	26000
Jammu	99000	45000
Kathaua	73000	48000
Kisthwar	63000	60000
Kulgam	55000	42000
Kupwara	99000	83000
Poonch	99000	81000
Pulwama	54000	36000
Rajauri	138000	110000
Ramban	58000	42000
Reasi	68000	52000
Samba	28000	16000
Shopian	35000	28000
Srinagar	5000	3000
Udhampur	73000	46000

Filters:

Filters in Power BI are used to find the Top 5 districts who are performing well and bottom districts who are underperforming. There are many types of filters in Power BI, I used Top N filtering.
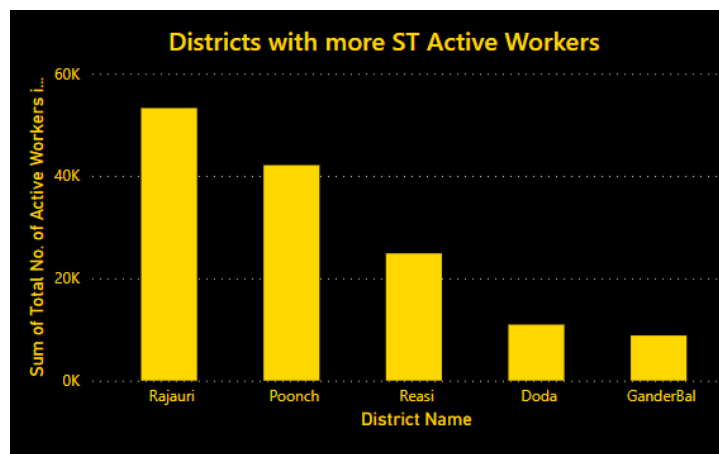
KPI:

A Key Performance Indicator is a measurable value that shows how effectively we are meeting goals.

Top Districts who are providing more Jobs to SC & ST:

Districts with more SC Active Workers
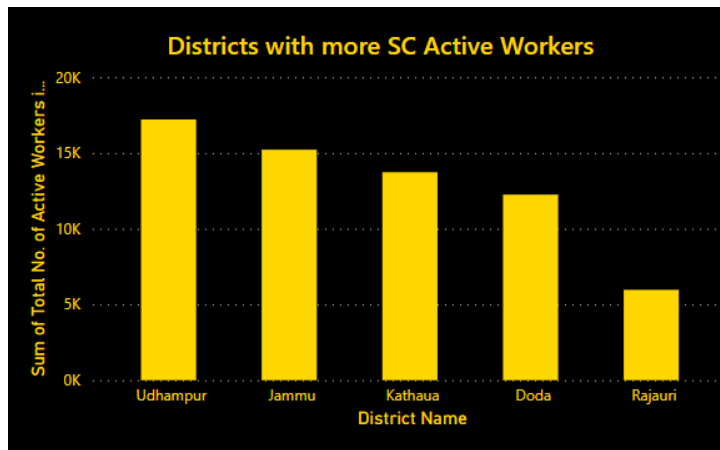
District Name	Active SC Workers
UDHAMPUR	172116
JAMMU	15218
KATHAUA	13728
DODA	12251
RAJAURI	5966

Districts with more ST Active Workers

District Name	Active ST Workers
RAJAURI	53257
POONCH	42100
REASI	24864
DODA	10944
GANDERBAL	8819

Total No.of Works TakenUP vs Ongoing Work vs Completed Work:

Total No. of Works Takenup VS Number of Ongoing Works VS Number of Completed Works by District
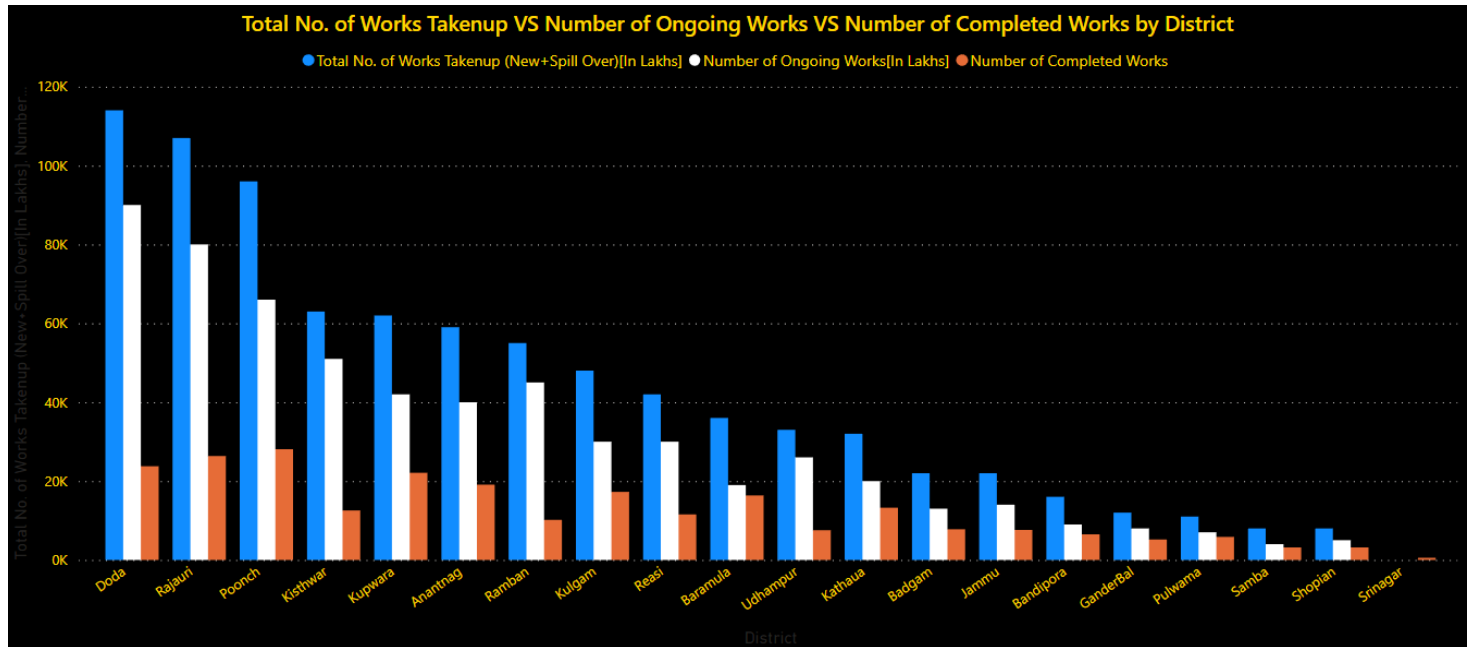
Total No.of Household Worked VS Total No.of Household who completed 100 Days Wage Employment By District:
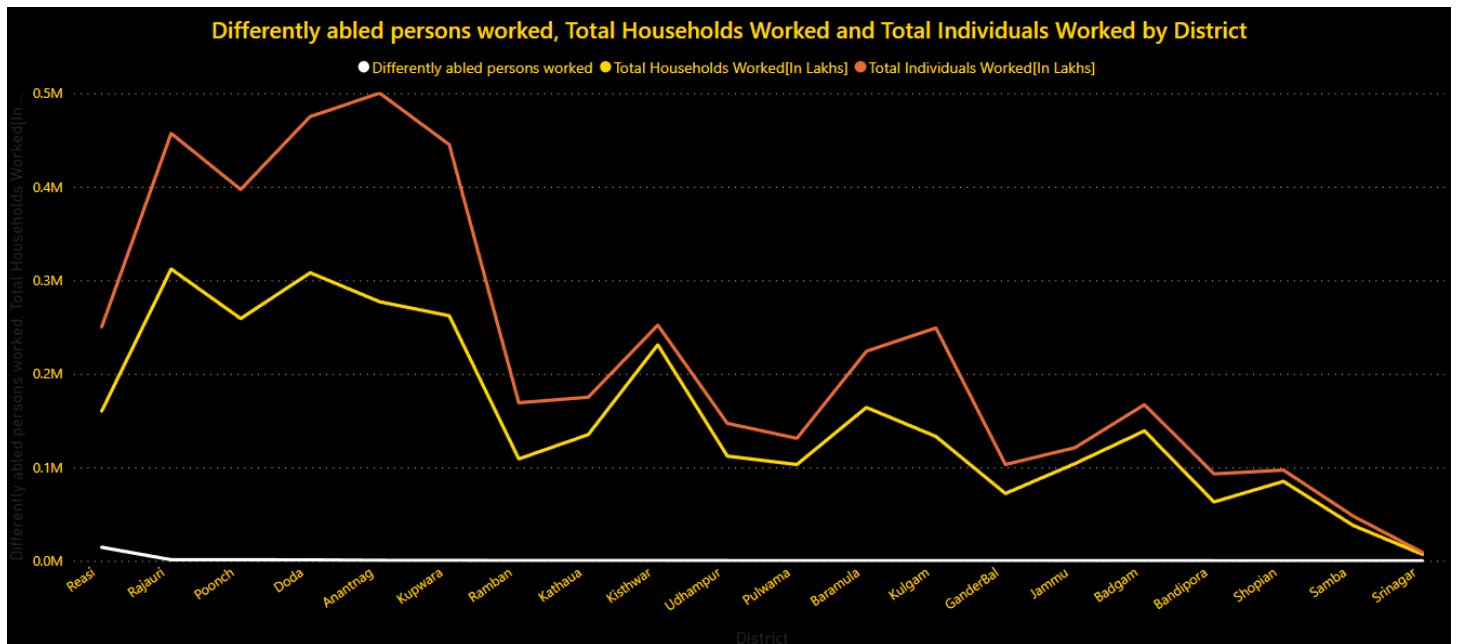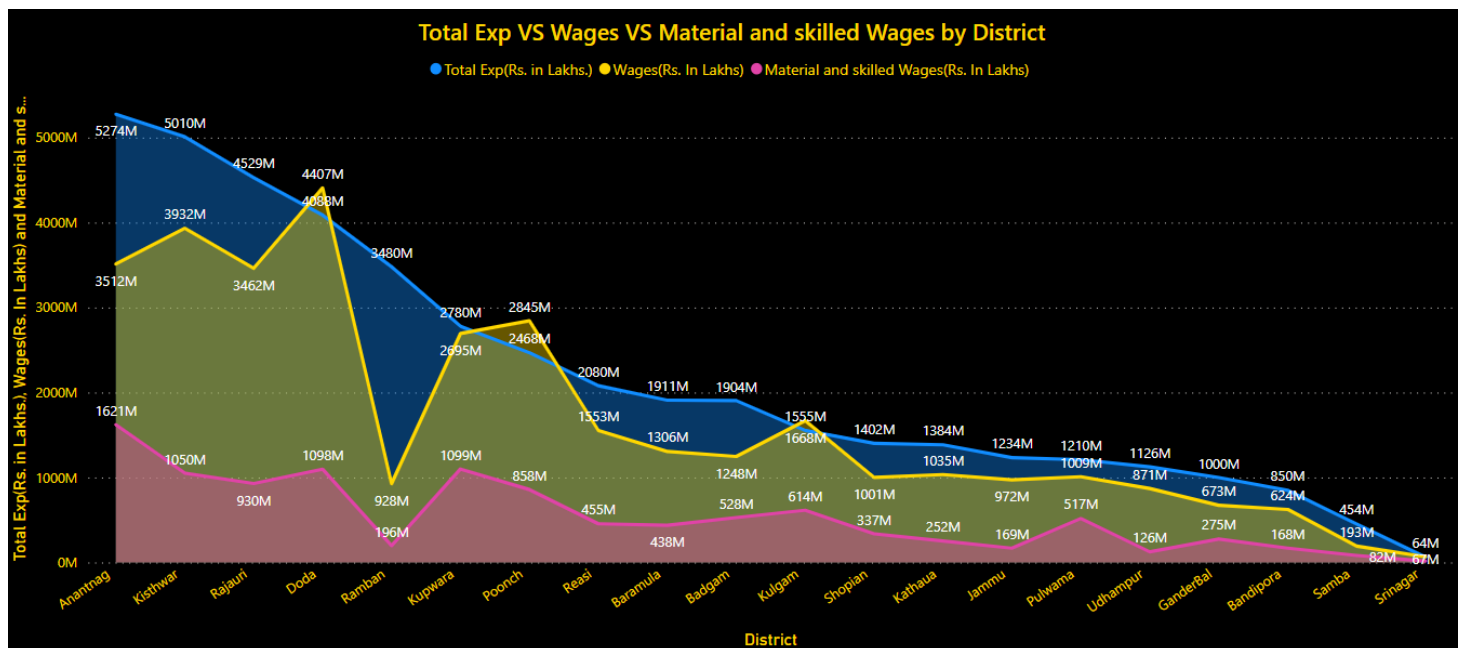

Total Households Worked VS Total No of HHs completed 100 Days of WageEmployment by District
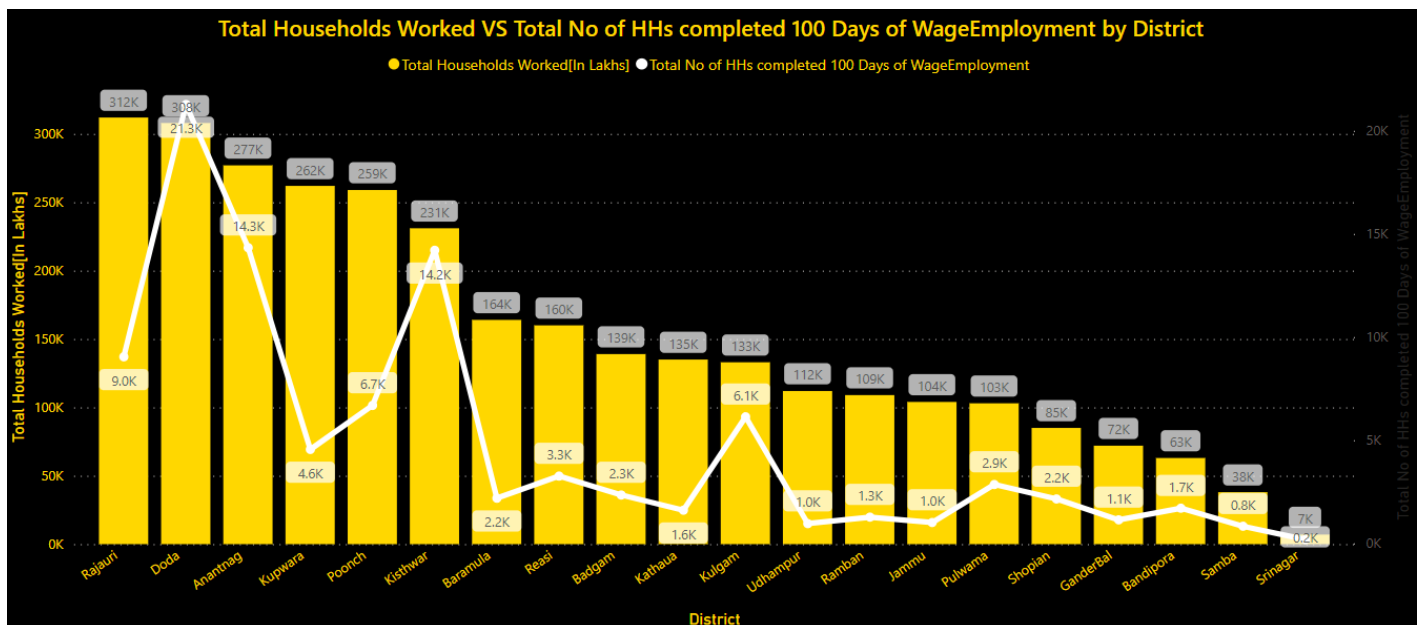
No.of Differently Abled vs Households vs Individual Workers:

Differently abled persons worked, Total Households Worked and Total Individuals Worked by District

● Differently abled persons worked ● Total Households Worked[In Lakhs] ● Total Individuals Worked[In Lakhs]

Total Exp Vs Wages Vs Material and Skilled Wages by District

Total Exp VS Wages VS Material and skilled Wages by District

● Total Exp(Rs. in Lakhs.) ● Wages(Rs. In Lakhs) ● Material and skilled Wages(Rs. In Lakhs)

Approved Labour Budget and Person days Generated So far By District:

Approved Labour Budget and Persondays Generated so far by District

● Approved Labour Budget[In Lakhs] ● Persondays Generated so far[In Lakhs]
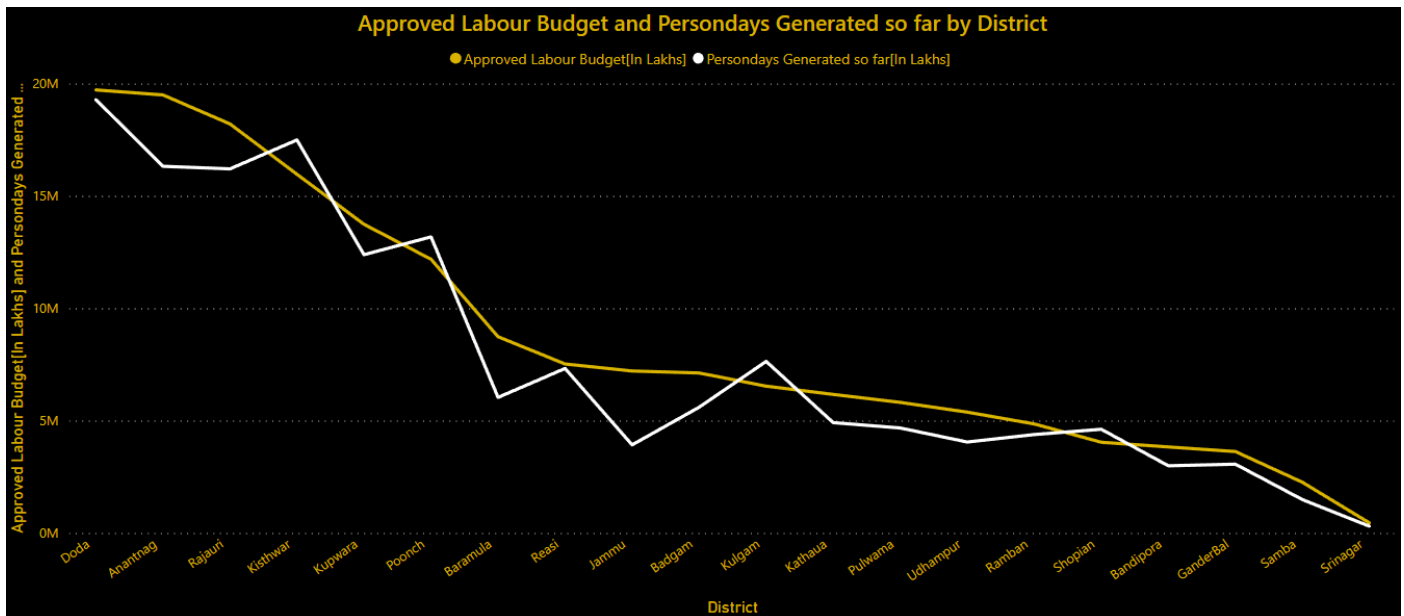
Key Insights:

- Wages is more than Total Expense in two districts they are **DODA, POONCH.**

- Max no.of Completed works in a district is **11153** in the year **2021** at **POONCH.**

- Udhampur has more **SC Workers** and Rajauri has more **ST workers. Ganderbal and Srinagar** didn't have SC workers in their district.

- **Srinagar** has less ST workers with 683.

- **Rajauri** has more Active workers, Active Job cards with **176000, 138000** and **Srinagar** has less active workers, job cards with **4000 & 3000**.

- **Baramula** has more No.of Blocks and No.of GP's with **26 & 402**.

- Doda has more Ongoing works with **49000.**

- Maximum amount spent for Agriculture in the year 2021 is **1548.43M**

Key Insights	FY 2022-2023	FY 2021-2022	FY 2020-2021	FY2019-2020	FY 2018-2019
Max no.of completed works	3180	11153	9586	6165	5173
Avg. wage rate per person	226.88	213.94	203.92	188.90	185.92
Max days of Employment provided to households	59	79	78	82	84
Min days of Employment provided to households	13	39	37	26	33
Max wage rate per person	227	214	204	189	186
Min wage rate per person	226	213	203	188	185
Total Households worked	371000	724000	750000	601000	627000
Total Individuals worked	460000	1087000	1129000	886000	947000
Differently abled persons worked	1332	4793	5054	5191	4931
Max cost per day per person	317	338	310	297	417
Min cost per day per person	233	250	230	214	207
Total Expenditure	3116M	11912M	11540M	9306M	7927M
Expenditure Spent for Agriculture	2390.27M	5991.22M	5730.01M	3352.11M	2585.74M
Expenditure spent for wages	2249M	8583M	11769M	6385M	5013M
Material and Skilled wages	748M	2378M	3073M	2438M	2196M
Total ADM Expenditure	91M	302M	445M	480M	466M
Admin Expenditure	3.41M	11.36M	17.65M	33.96M	35.35M

Conclusion:

As we see the analysis of MGNREGA Act of Jammu & Kashmir Union Territory which has 20 Districts. We saw the separate analysis of how each districts performed.

Analyzing the Past: Data Analyst

Analyzing the Present: Business Intelligence

Predicting the future: Data Scientist