SPRINT 2 DELIVERABLES

TEAM ID: **PNT2022TMID21477**

WORK DONE: **Dashboard with useful insights for further work with respect to predictive analysis for CROP PREDICTION**

Tool used: Cognos analytics by IBM

Link of work done:

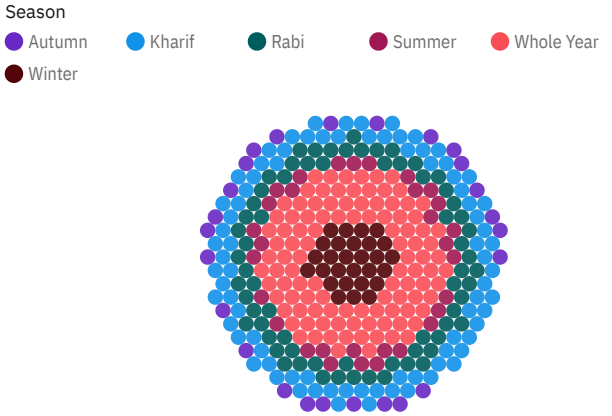
https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FSPRINT%2B2%2BDELIVERABLES%2BCROP%2BPREDICTION&action=view&mode=dashboard&subView=model00000184469edc1b_00000000

Insights:

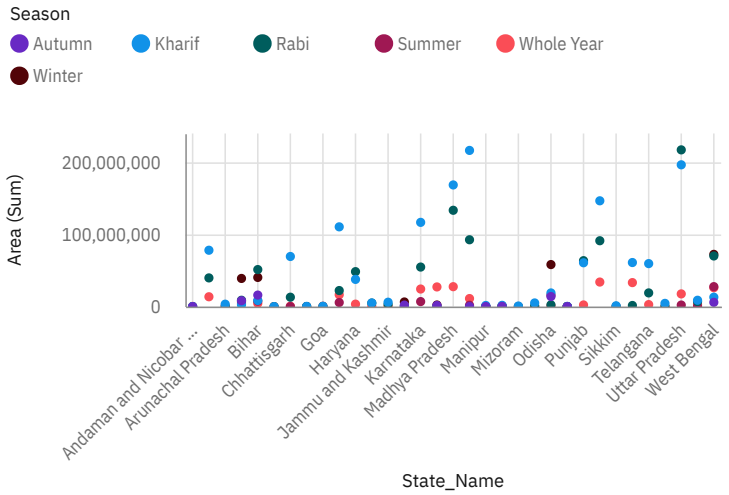
- For Total production area, most significant values of Season are **Kharif and Rabi**, whose respective Area values add up to almost 2.0 billion, or 84.3 % of the total. Area is unusually **high** when Season is Kharif.
- For Area, the most significant value of State_Name is **Uttar Pradesh**, whose respective Area values add up to almost 434 million, or 18.7 % of the total.
- Area is unusually high when the combinations of Season and State_Name are **Rabi and Uttar Pradesh, Kharif and Maharashtra, Kharif and Uttar Pradesh and Kharif and Madhya Pradesh.**Area is unusually high when State_Name is **Uttar Pradesh.**
- Area ranges from almost **13000**, when State_Name is Chandigarh, to nearly **434 million**, when State_Name is **Uttar Pradesh.**
- Production ranges from over **64 million**, when Season is **Autumn**, to approximately **134 billion**, when Season is **Whole Year.**
- For Area, the most significant values of Season are **Kharif and Rabi**, whose respective Area values add up to **nearly 2.4 billion,** or 79.7 % of the total.Area ranges from **over 48 million**, when Season is **Autumn**, to over **1.4 billion,** when Season is **Kharif.**Area is unusually high when Season is **Kharif.**
- Production ranges from nearly 64 thousand, when **State_Name is Chandigarh,** to approximately 98 billion, when **State_Name is Kerala.** Production is unusually high when **State_Name is Kerala, Andhra Pradesh and Tamil Nadu.**
- For Production, the most significant values of Crop_Year are **2011 and 2013**, whose respective Production values add up to **approximately 27 billion**, or 19.3 % of the total.Production ranges from over 6.9 million, when Crop_Year is 2015, to approximately 14 billion, when Crop_Year is 2011.Production is most unusual when Crop_Year is **2015, 2011 and 1997.**
- For Production, the most significant values of District_Name are **KOZHIKODE and MALAPPURAM**, whose respective Production values add up to approximately 30 billion, or 21.1 % of the total. Production ranges from 2, when District_Name is **MUMBAI**, to approximately 15 billion, when District_Name is **KOZHIKODE.** Production is unusually high when District_Name is **KOZHIKODE and MALAPPURAM.**
- For Production, the most significant value of State_Name is **Kerala**, whose respective Production values add up to approximately 98 billion, or 69.3 % of the total.Production is unusually high when State_Name is **Kerala, Andhra Pradesh and Tamil Nadu.**Production is unusually high when the combinations of State_Name and Crop_Year are **Kerala** and 2005, **Tamil Nadu** and 2011, **Kerala** and 2006, **Kerala and 2004, Kerala and 2014 and more.**
- For Production, the most significant value of State_Name is **Uttar Pradesh**, whose respective Production values add up to over 2.2 billion, or 39.8 % of the total.
- Production is unusually high when State_Name is **Uttar Pradesh.**Production is unusually high when the combination of Crop and State_Name is **Sugarcane and Uttar Pradesh.**
- Regarding Rice production For Area of production, the most significant values of State_Name ar**e Uttar Pradesh, West Bengal, and Odisha**, whose respective Area values add up to almost 292 million, or 39 % of the total.For Area, the most significant value of Season is Kharif, whose respective Area values add up to over 420 million, or 56.2 % of the total.Area is unusually high when Season is Kharif. Area is unusually high when State_Name is Uttar Pradesh, West Bengal and Odisha.
- With respect to sugarcane Production ranges from nearly 64 thousand, when State Name is **Chandigarh**, to approximately 98 billion, when State Name is **Kerala.** Production is unusually high when State Name is **Kerala, Andhra Pradesh and Tamil Nadu. Sugarcane production is directly proportional to area**
- **Coconut production:** Coconut production is **directly proportional to area** .It's production is also gradually **increasing over a time of period and its production is high in Kerala .It does not depends on season**

Tab 1

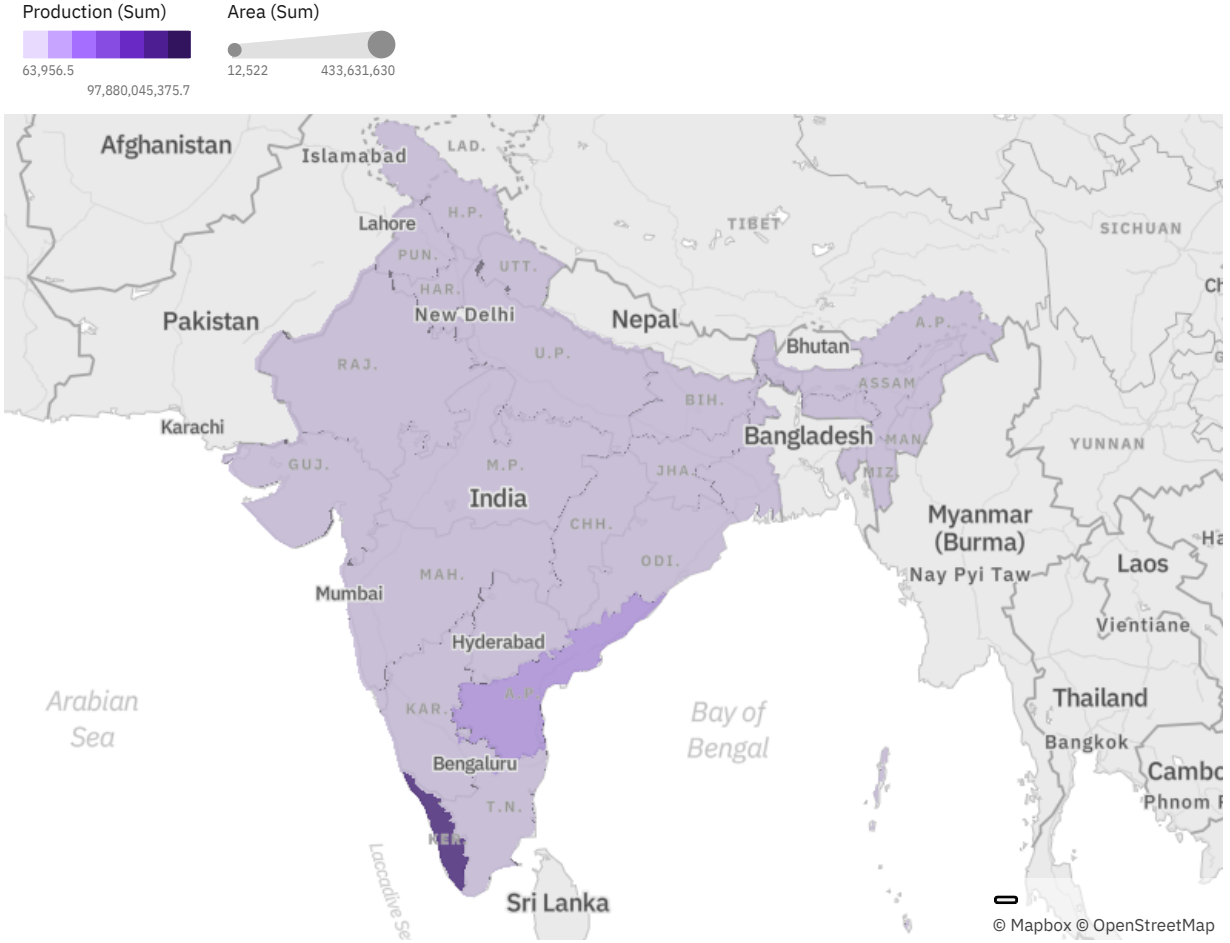
Crop and season



Area by StateName and Season

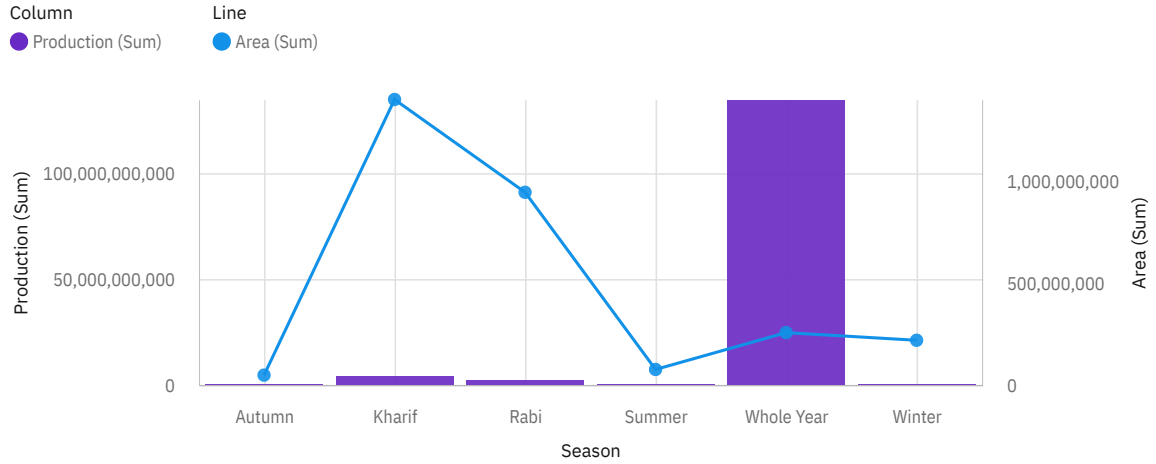


Statewise area and production

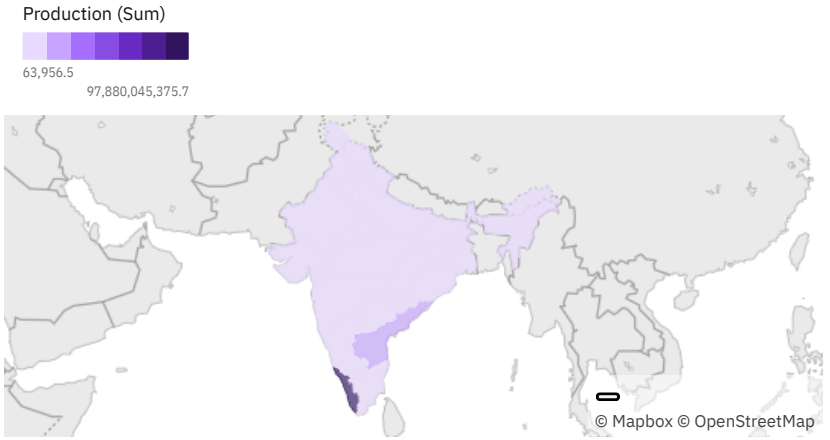


Tab 2

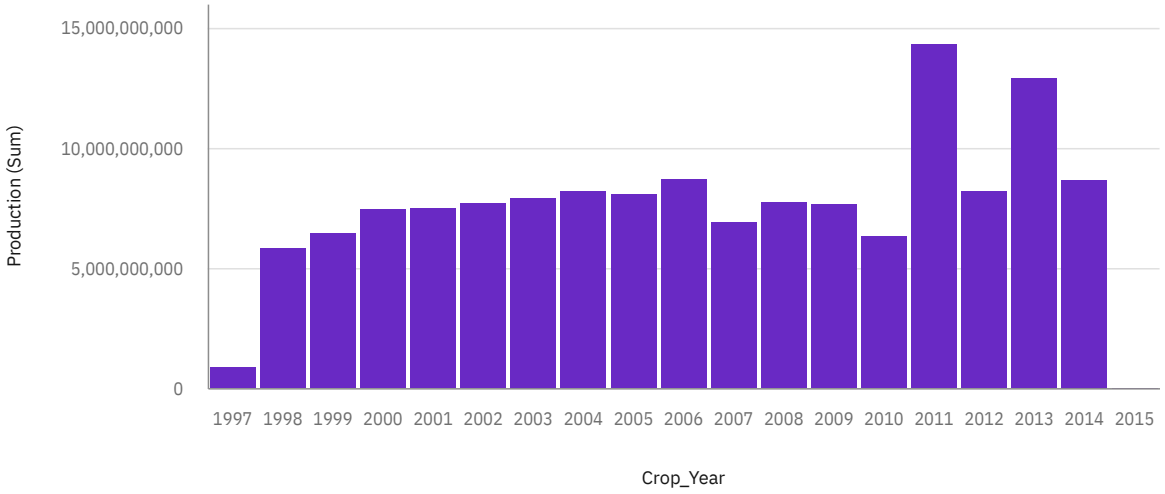
Area and Production by Season



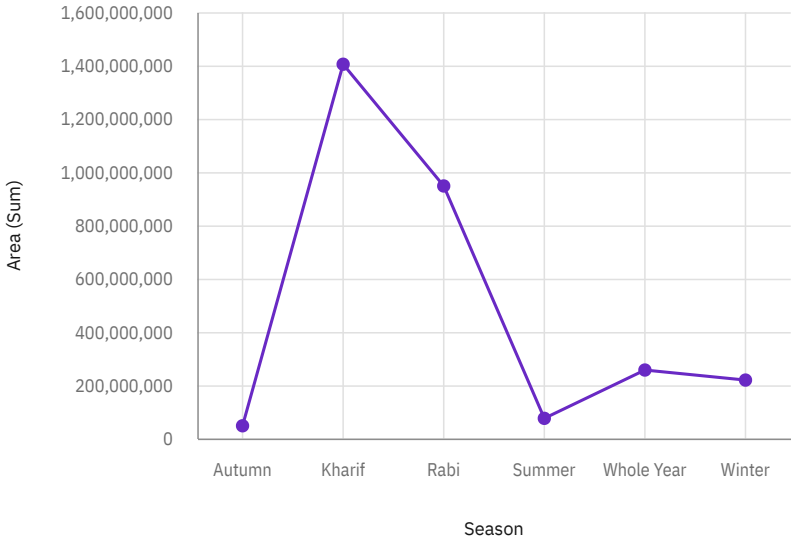
Production for State_Name regions



Production by Crop_Year

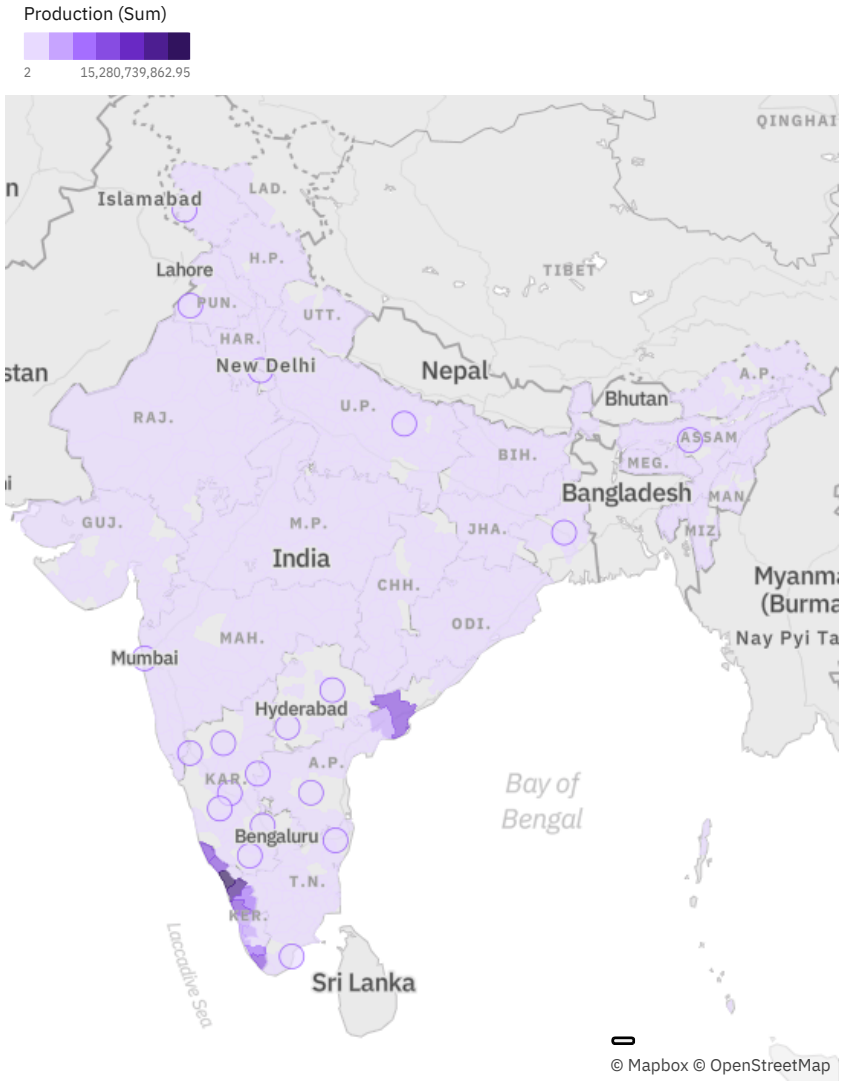


Area by Season

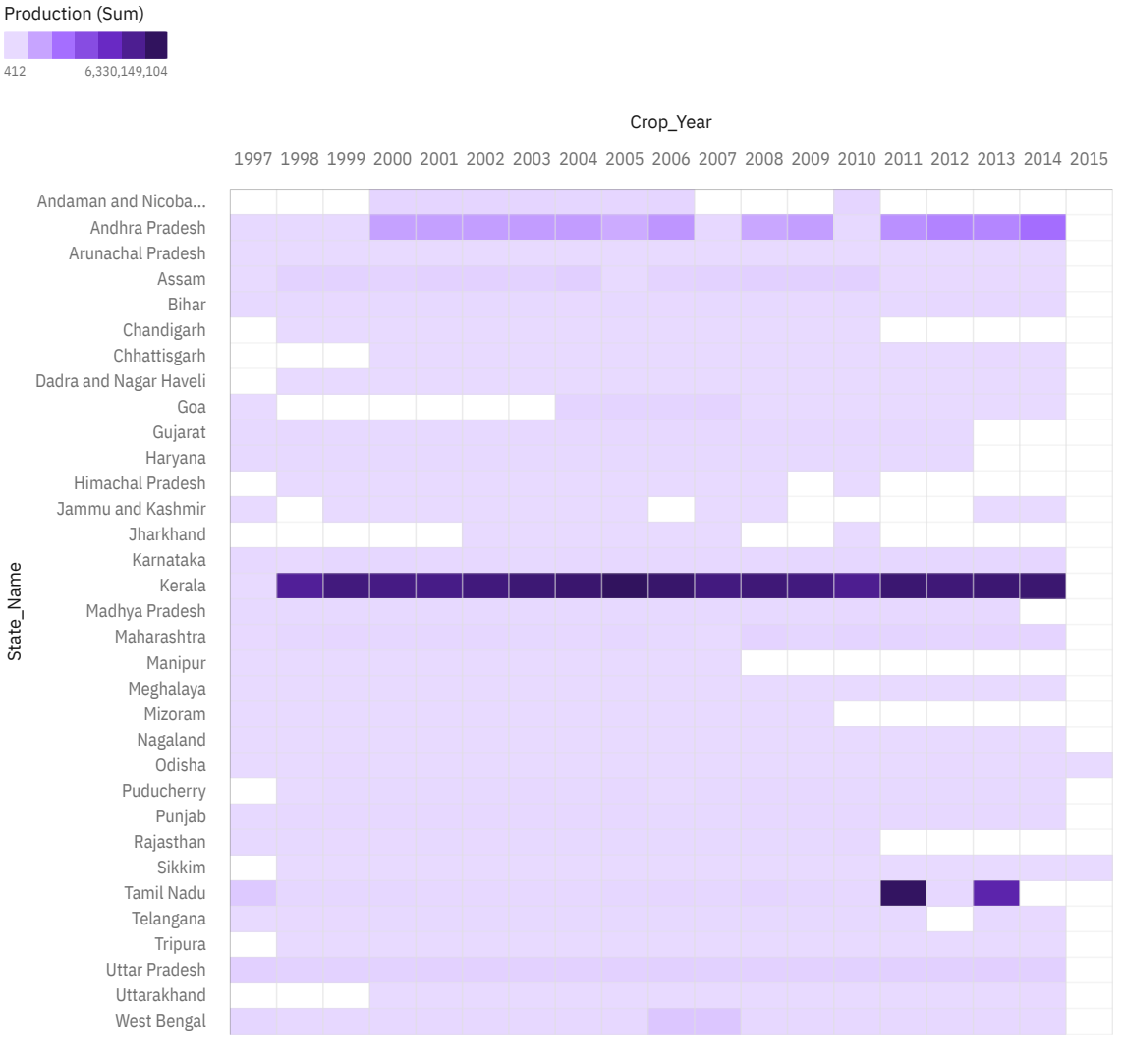


Tab 3

District wise production

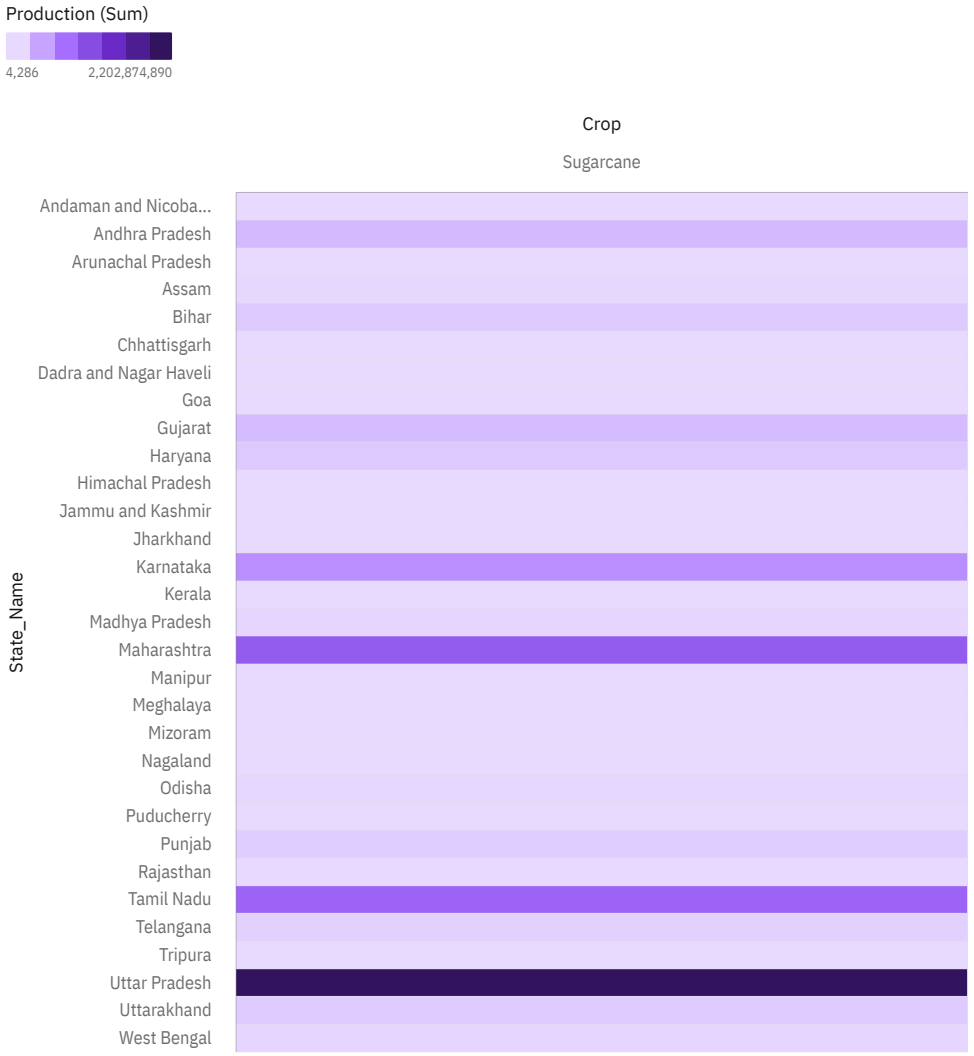


Production by State_Name and Crop_Year

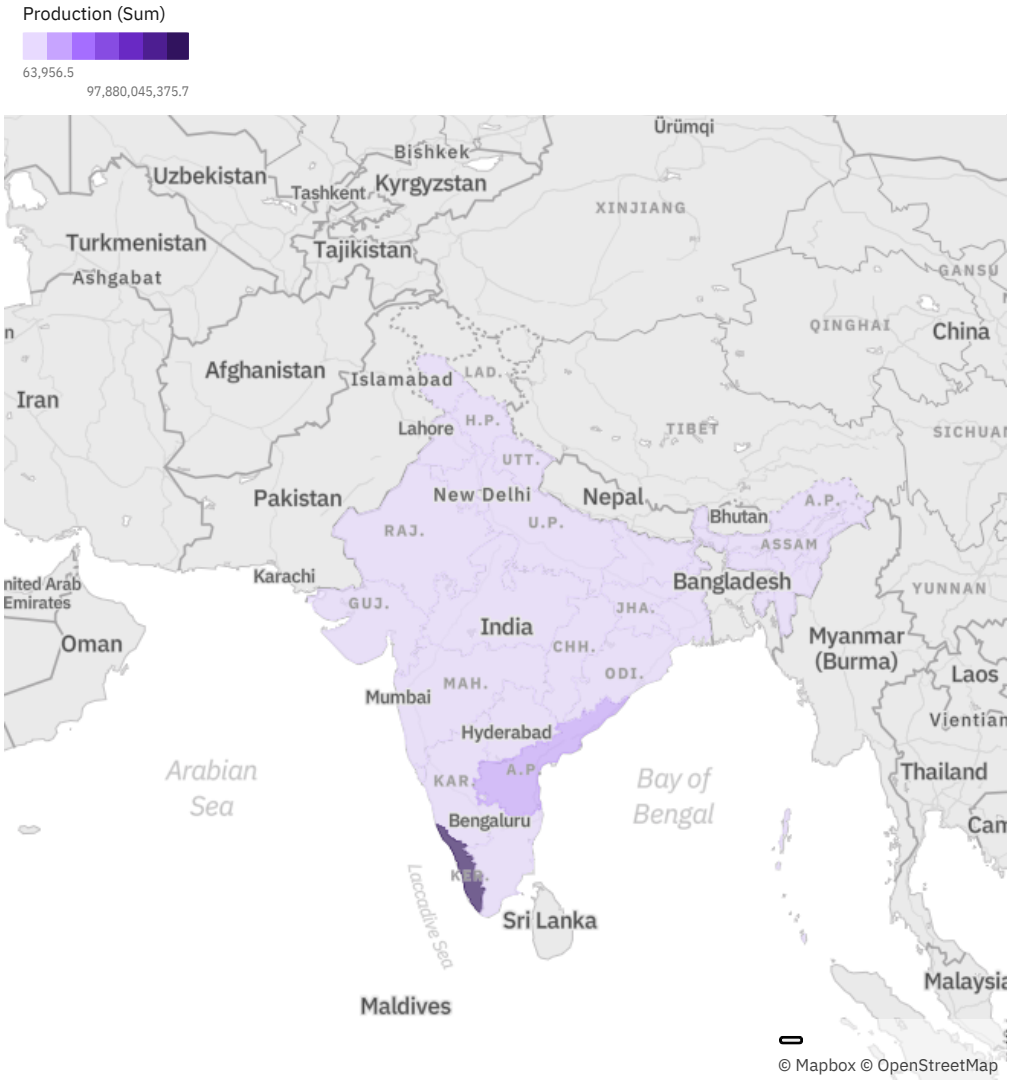


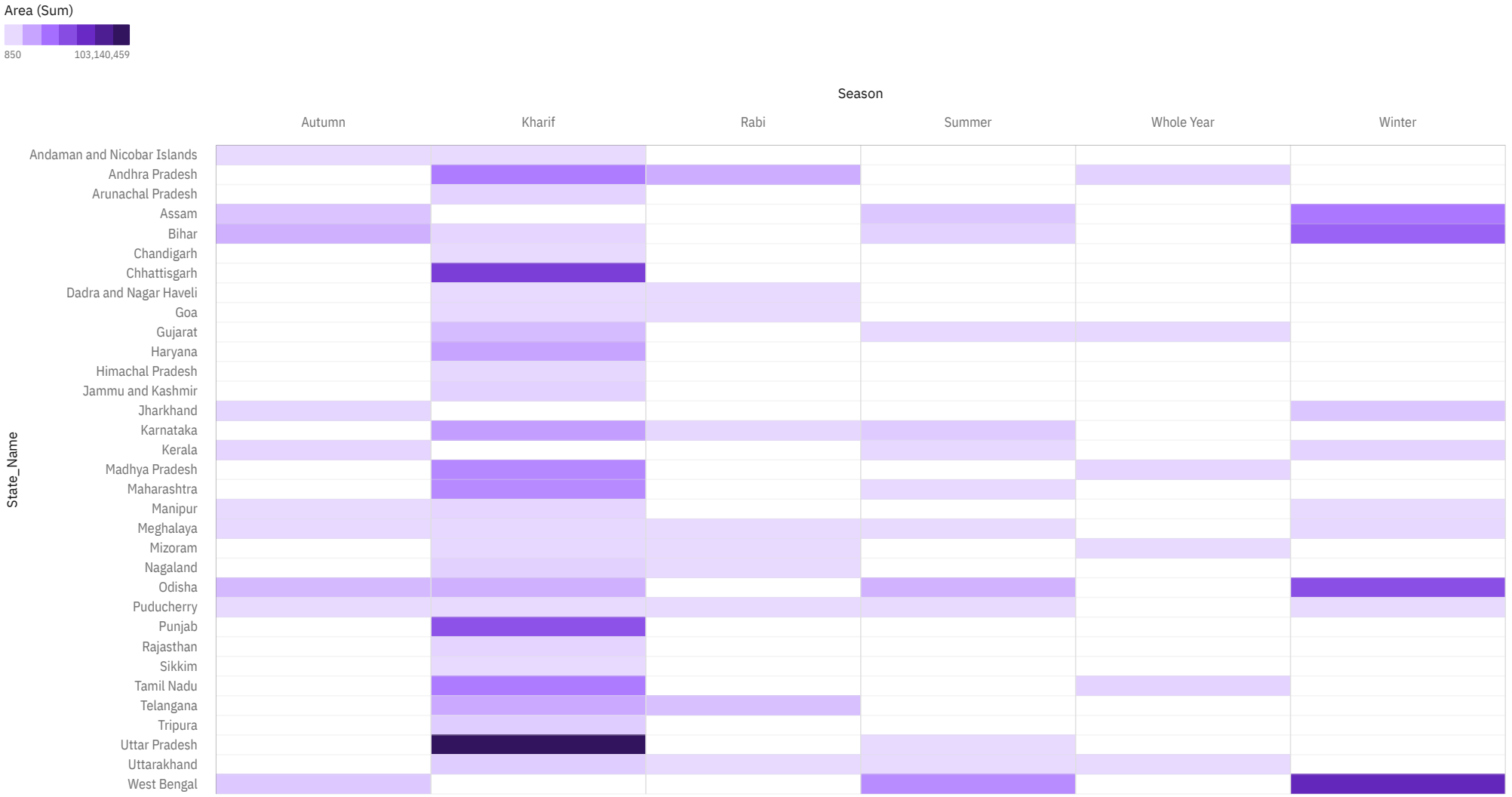
Tab 4

SugarCane Production by State



Production for State_Name regions



Tab 5

Area by State_Name and Season