

Product Performance

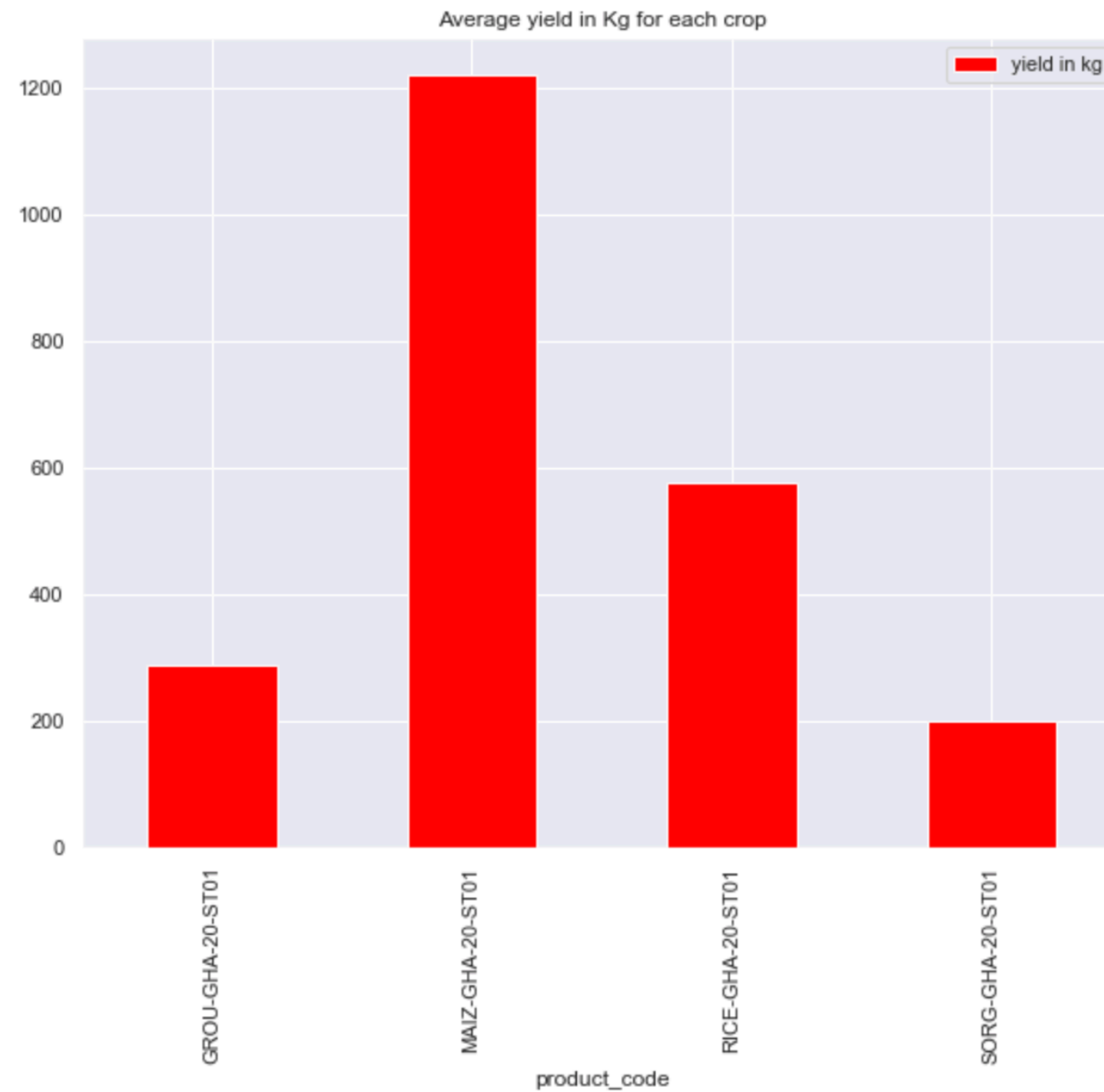
Ghana 2019 season

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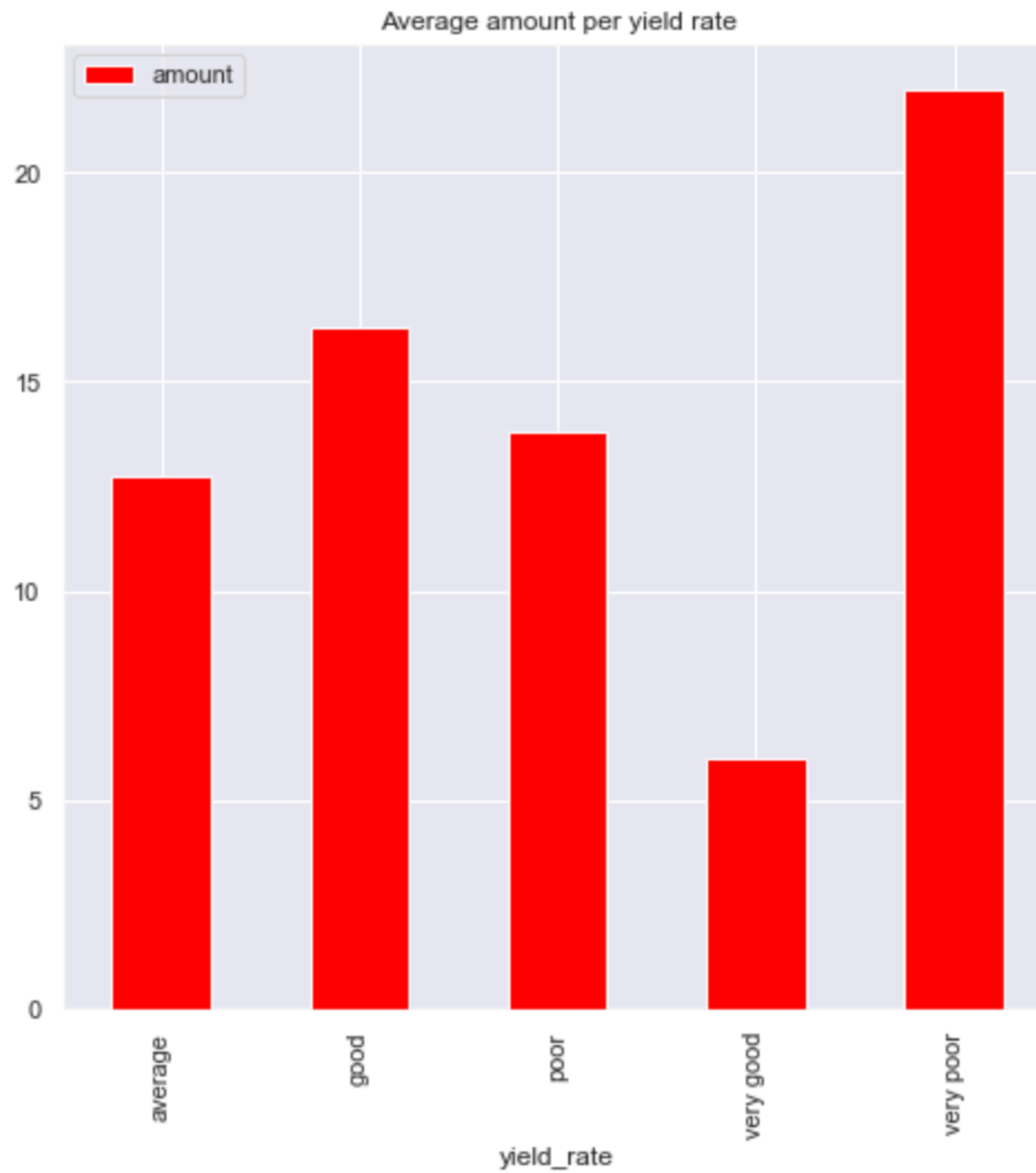
Summary

- 72 records in the 2019 cohort that responded to survey call (call_status: connected)
- 24 districts and 4 regions across Ghana
- 36 payouts made
- Farm size, Literacy etc are missing for most records

Crop yields

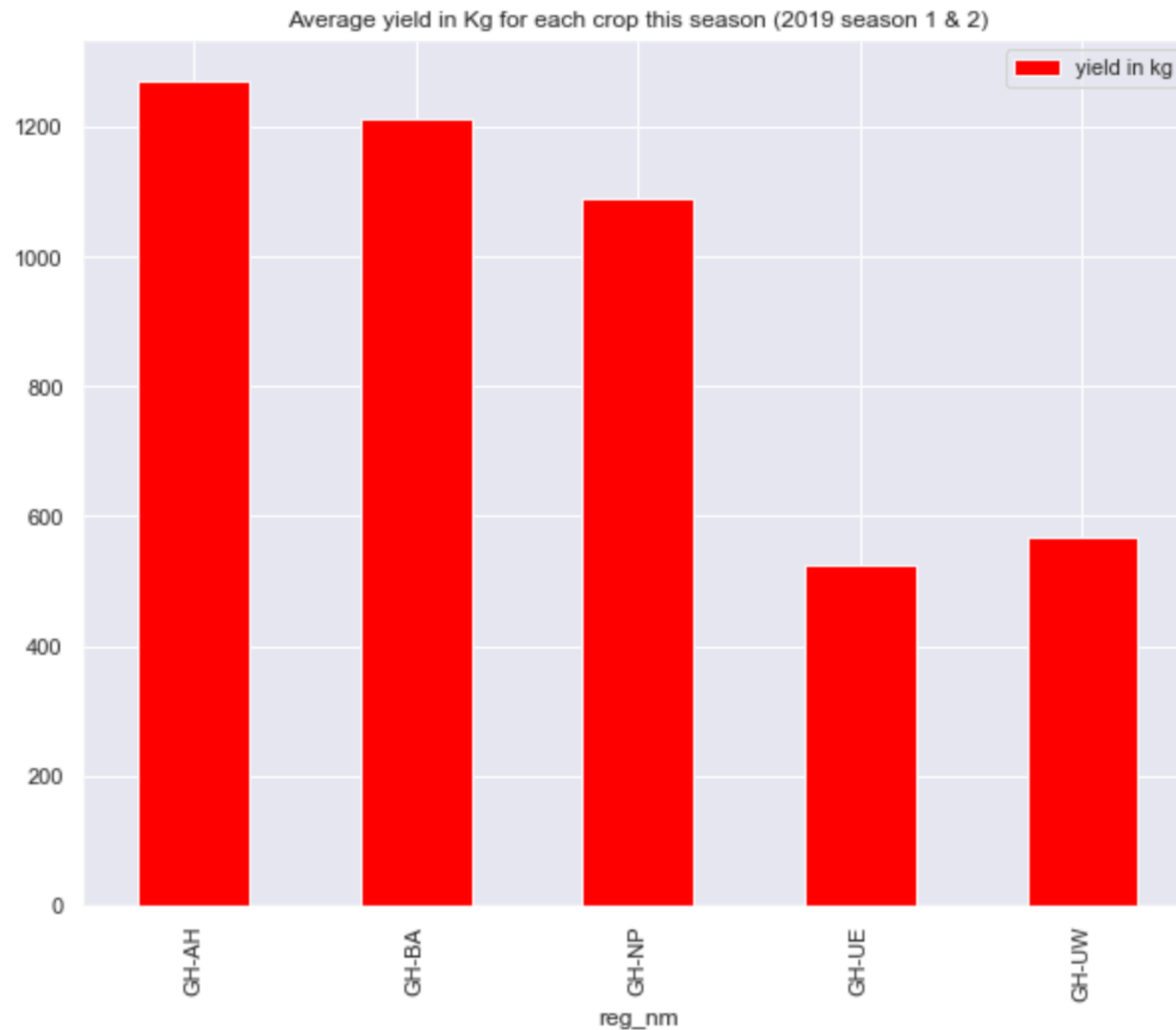


Maize had the most yield for the season on average



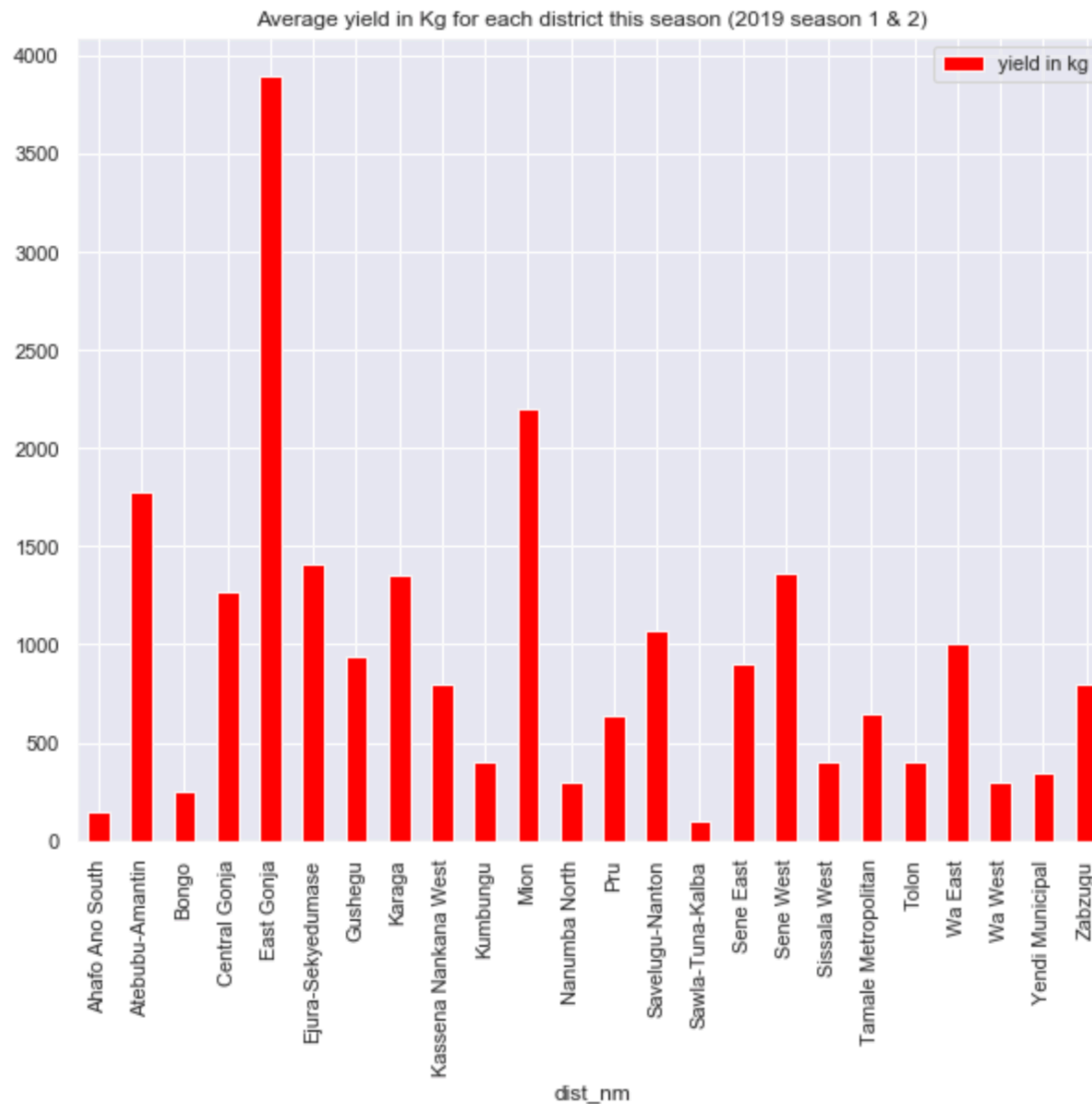
Very poor yield rates had the highest average payout

Varying crop yields?



The region with the highest average crop yield is GH-AH.

The crop yield varies from region to region, GH-UE has the lowest yield from the data



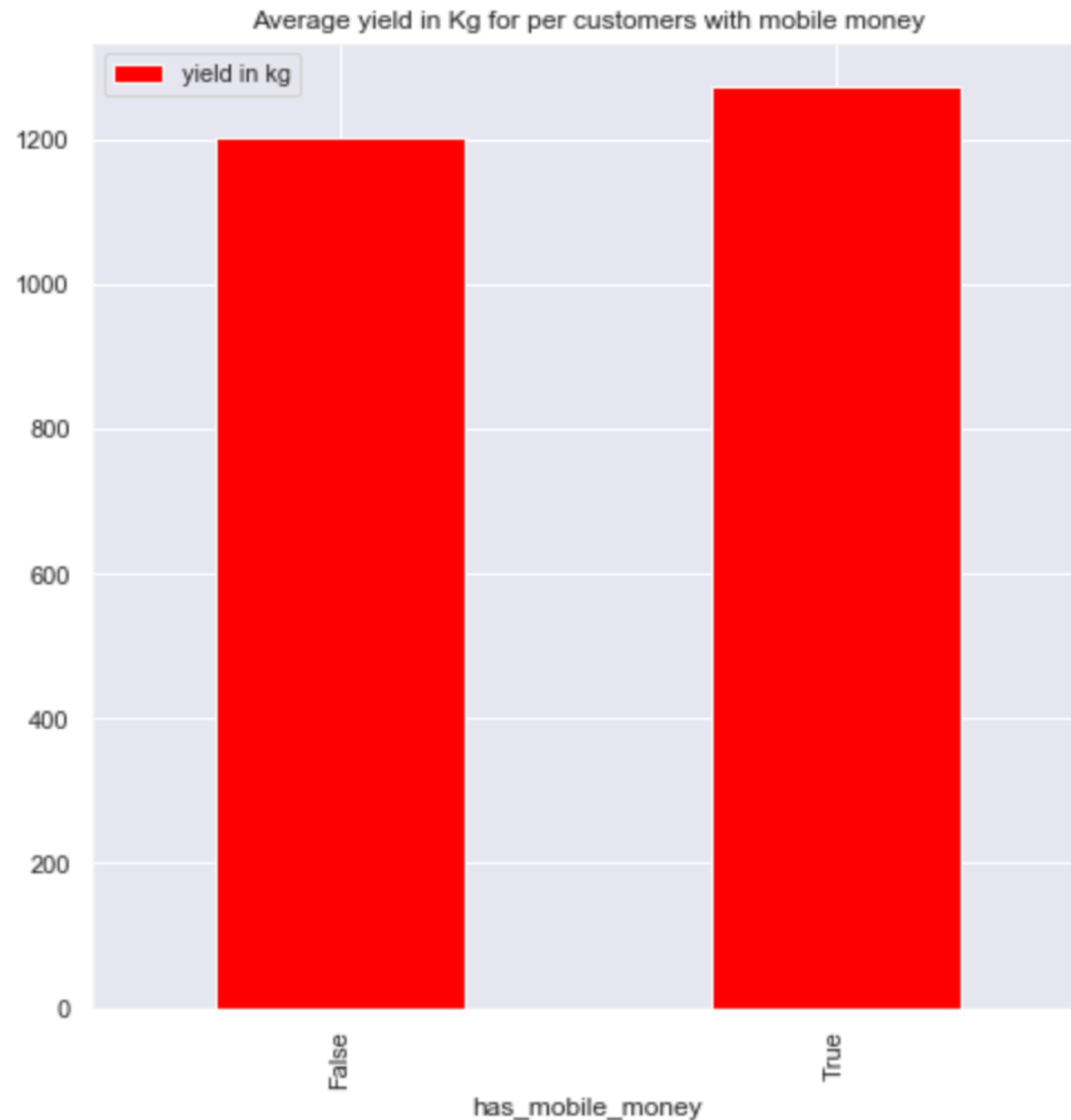
From the chart crop yield varies from district to district, East Gonja being the high the highest and Sawla-Tuna-Kalba being the highest

Maize Production

According to TradingEconomics a high yield of maize is about 1800kg per hectare and a poor yield is about about 1300kg per hectare.

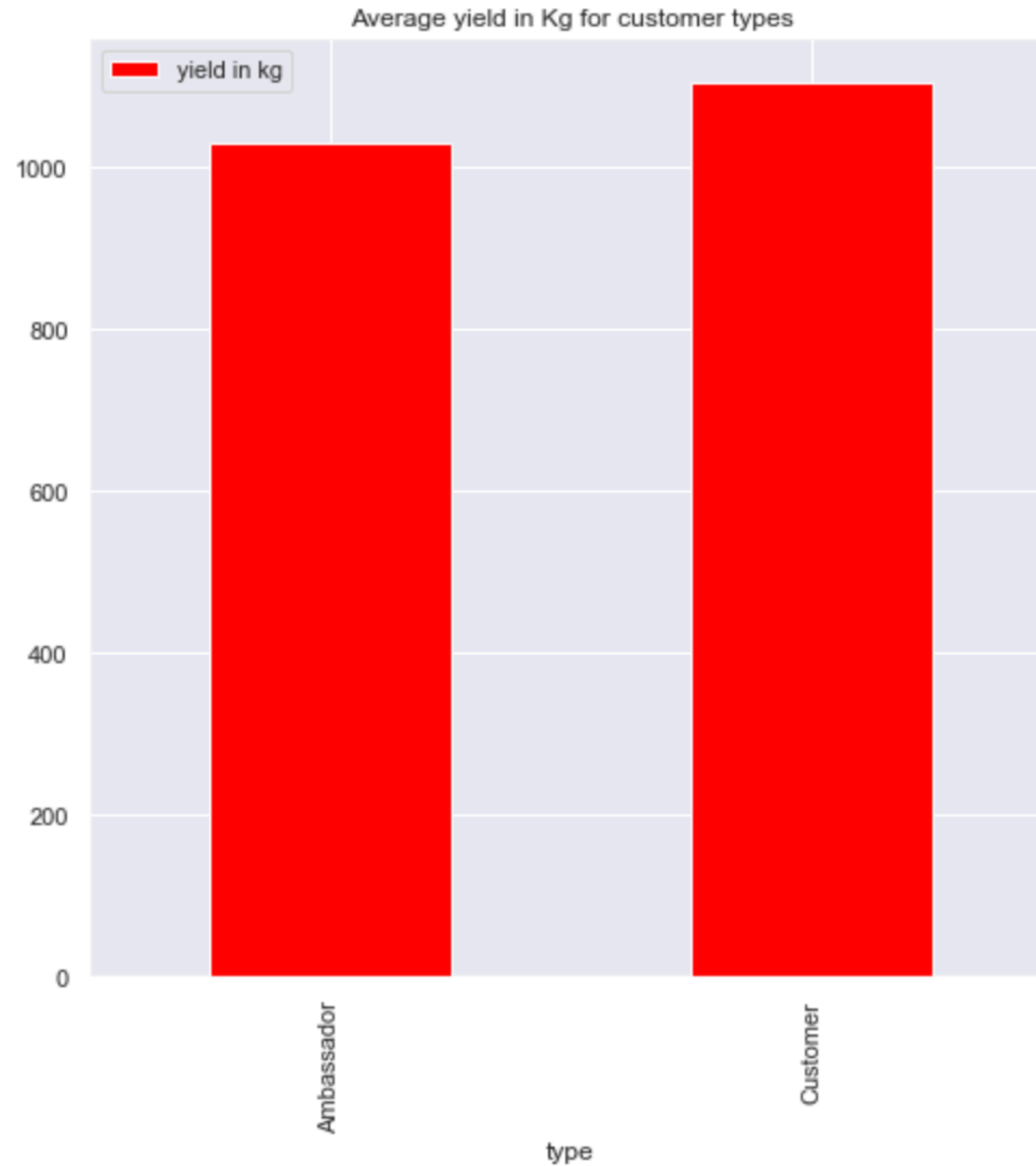
*Note: Using our dataset Yield per hectare cannot be derived as the farm size is not specified for most records

Factors influencing crop yield



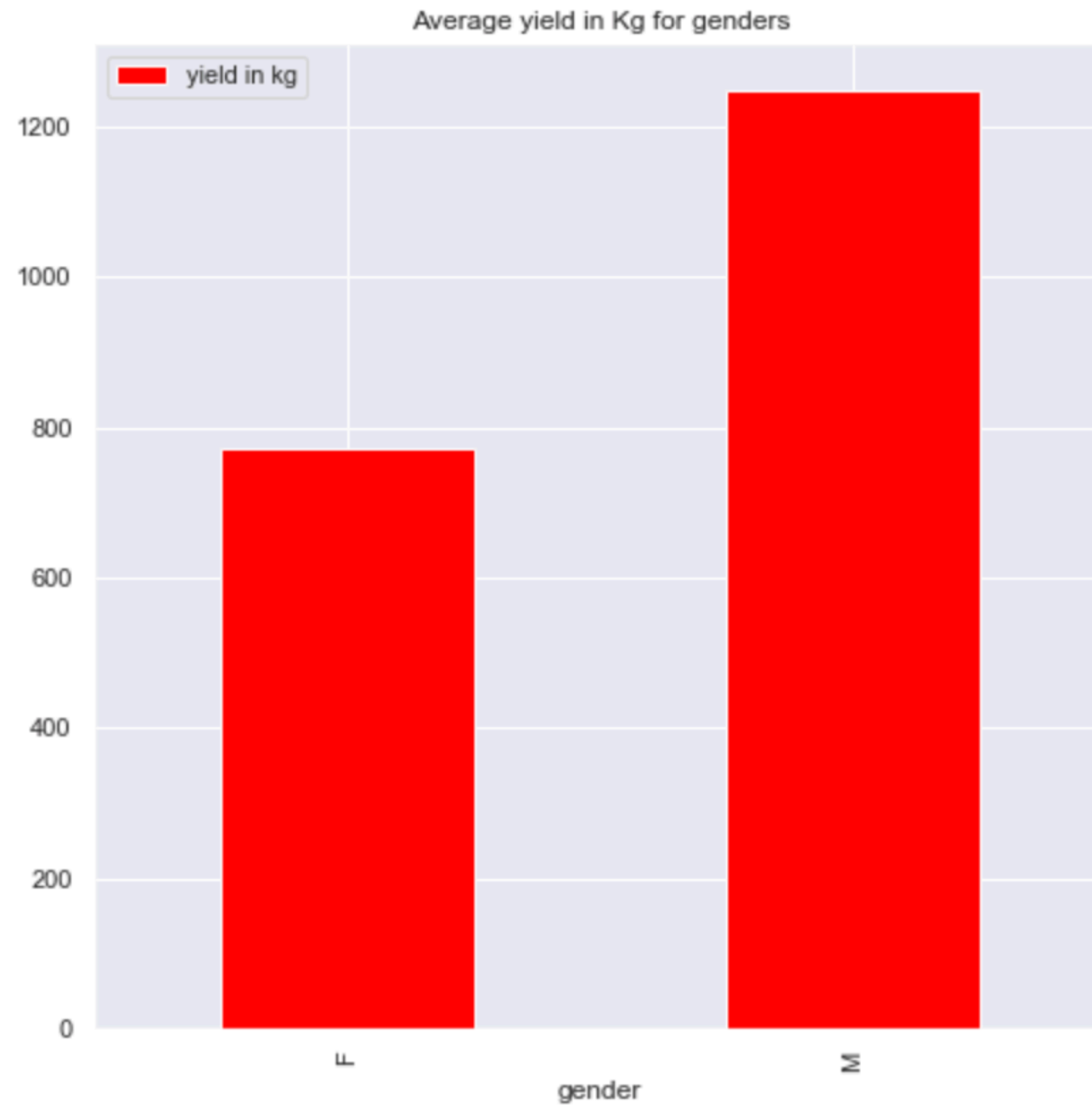
There seems to be no significant difference in yield between farmers who have mobile money and those who don't

Customer type?



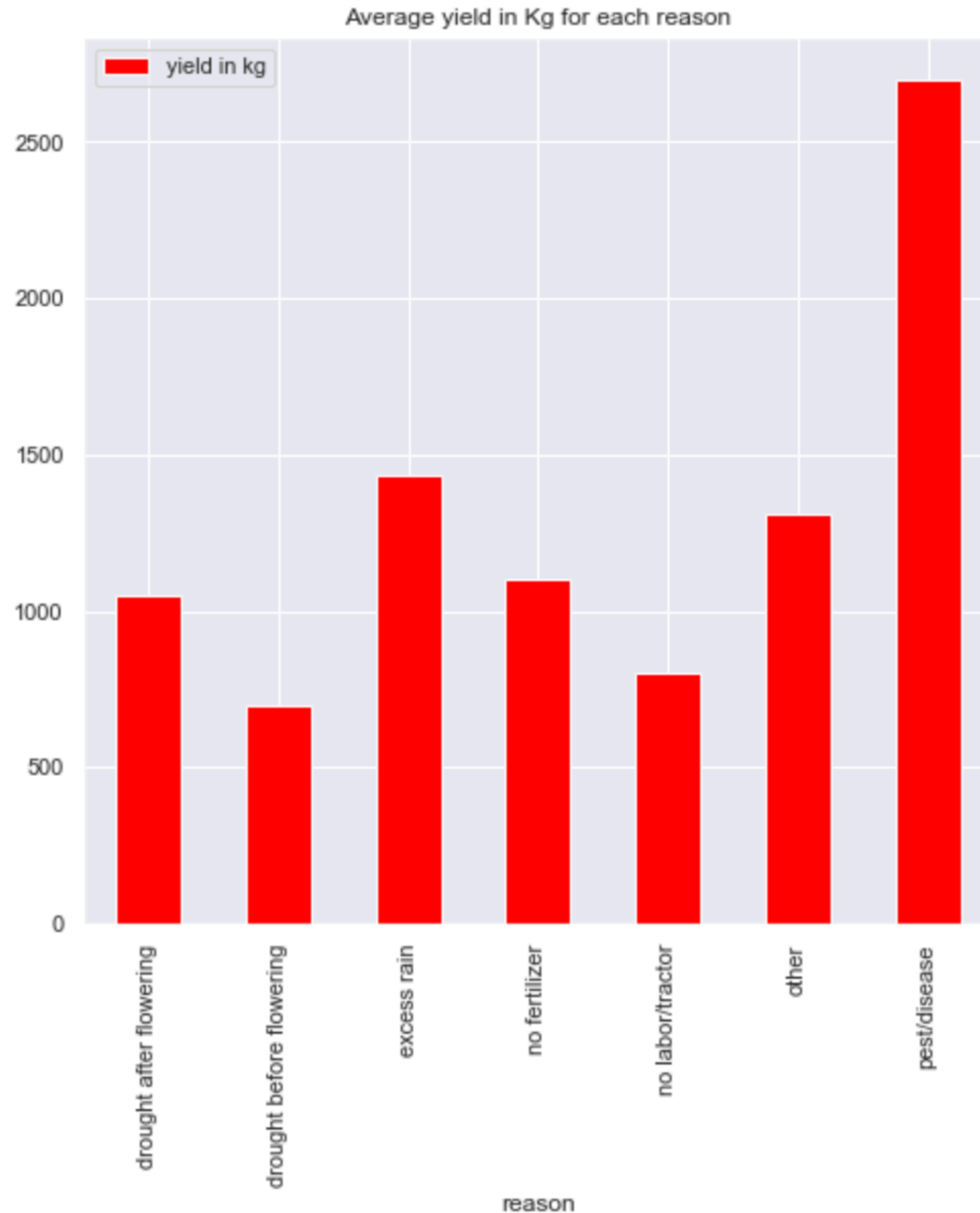
There seems to be no significant difference in yield between farmers who are ambassadors and regular customers

Gender?



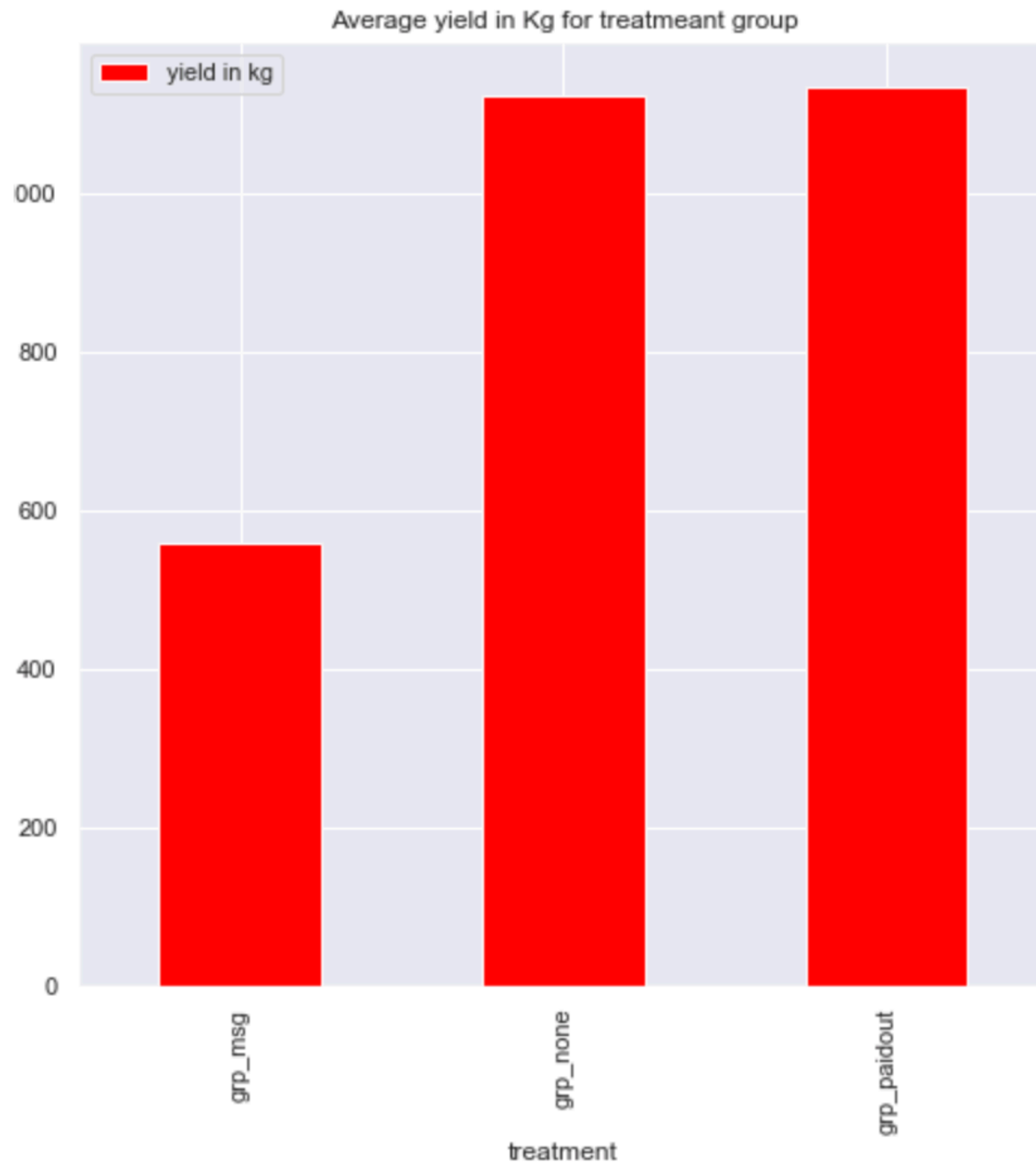
The Gender of the farmer influence the yield of crops. Male farmers have a higher yield.

Reason?



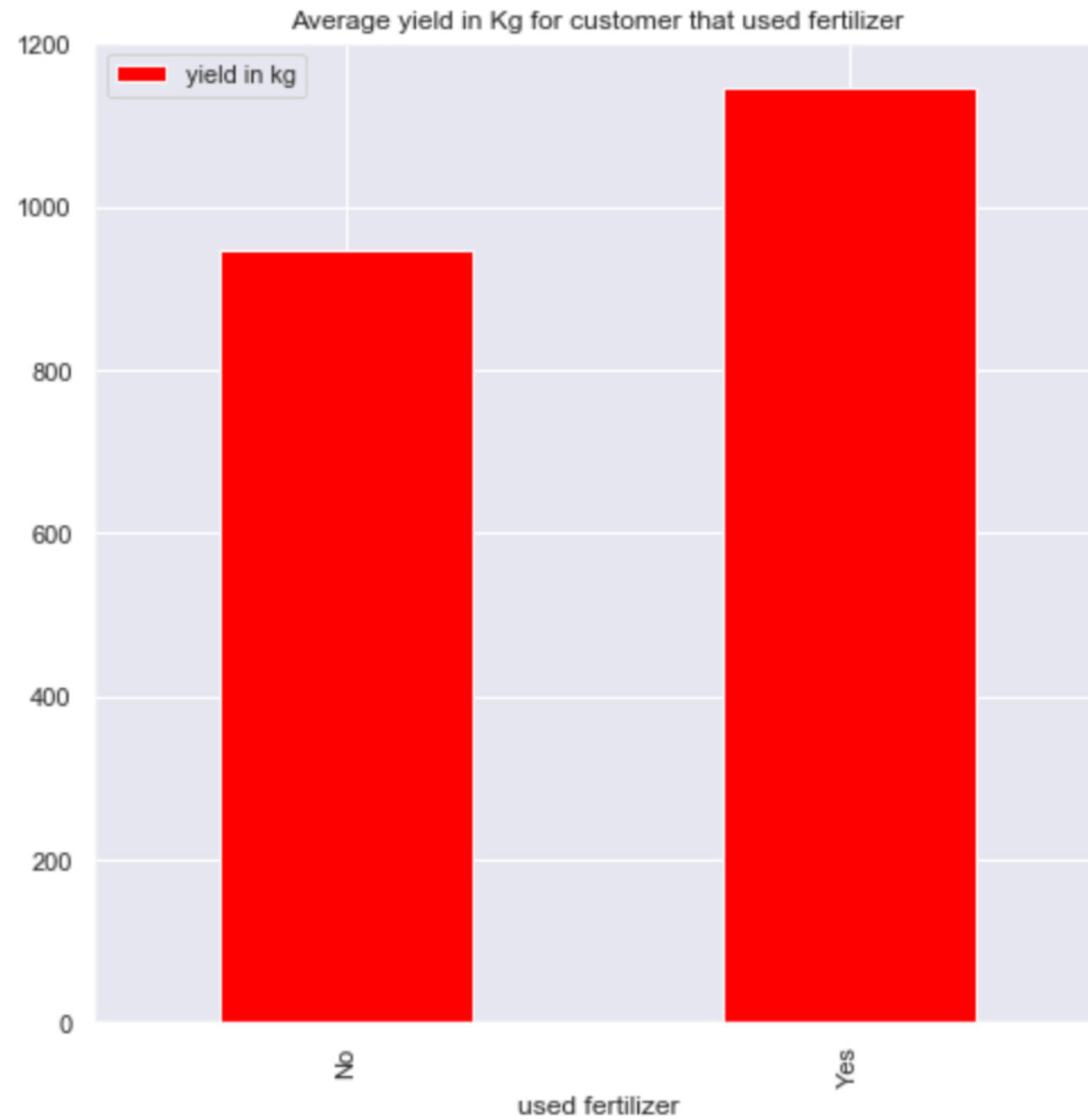
Farmers who had pest/disease reason for yield loss, had more average produced yield

Treatment Group?



Farmers who had planting advisors had the lowest average yield, however other farmers had almost double yields compared to the ones who received planting advisors.

Fertilizer?

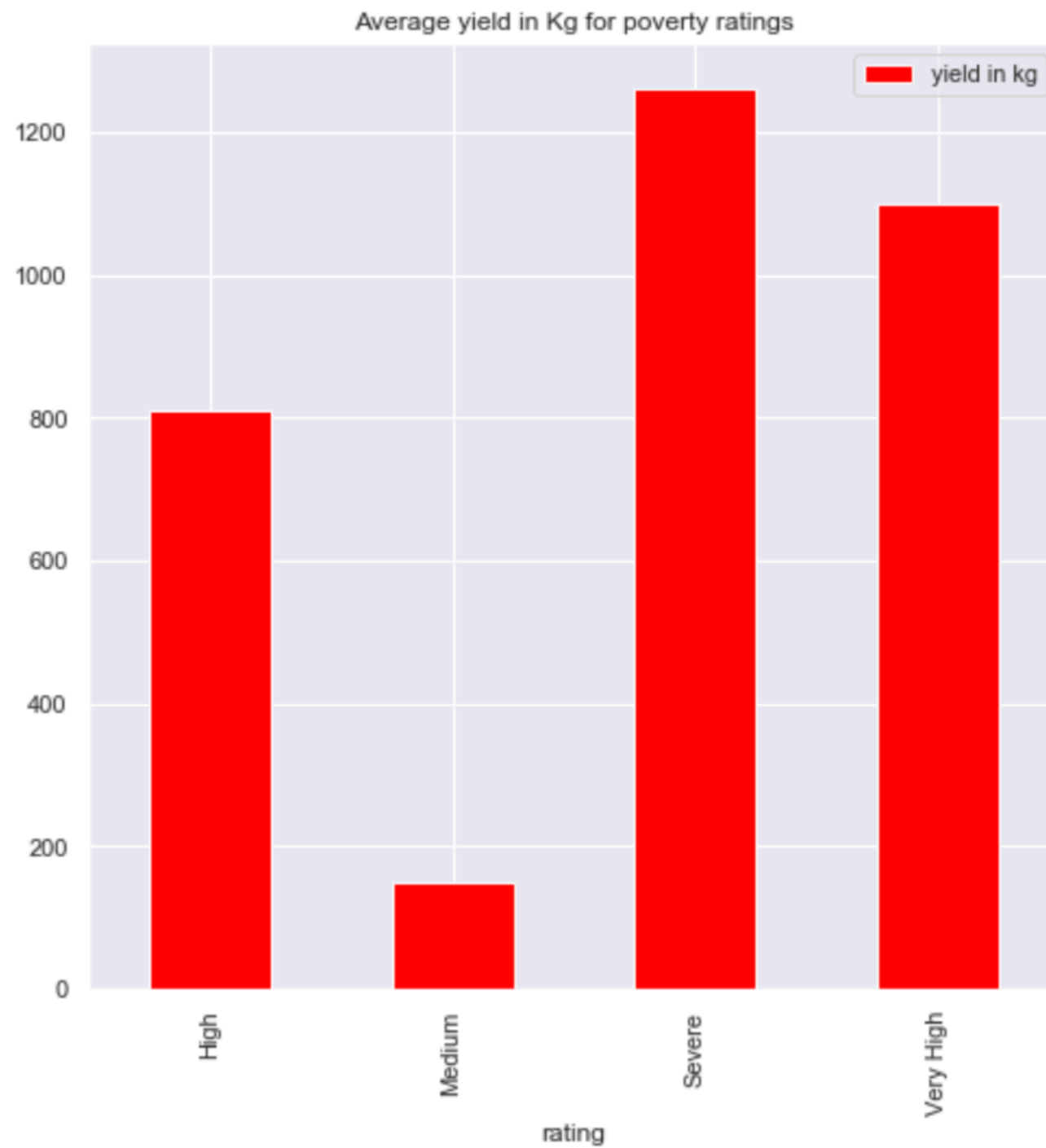


Fertilizers had influence on the crop yield.

Poverty Ratings?

- Data was collected from [Ghana statistical service](#) it contained poverty levels for Ghana districts
- The data was used to create ratings and average yield was calculated for each rating

Poverty rating



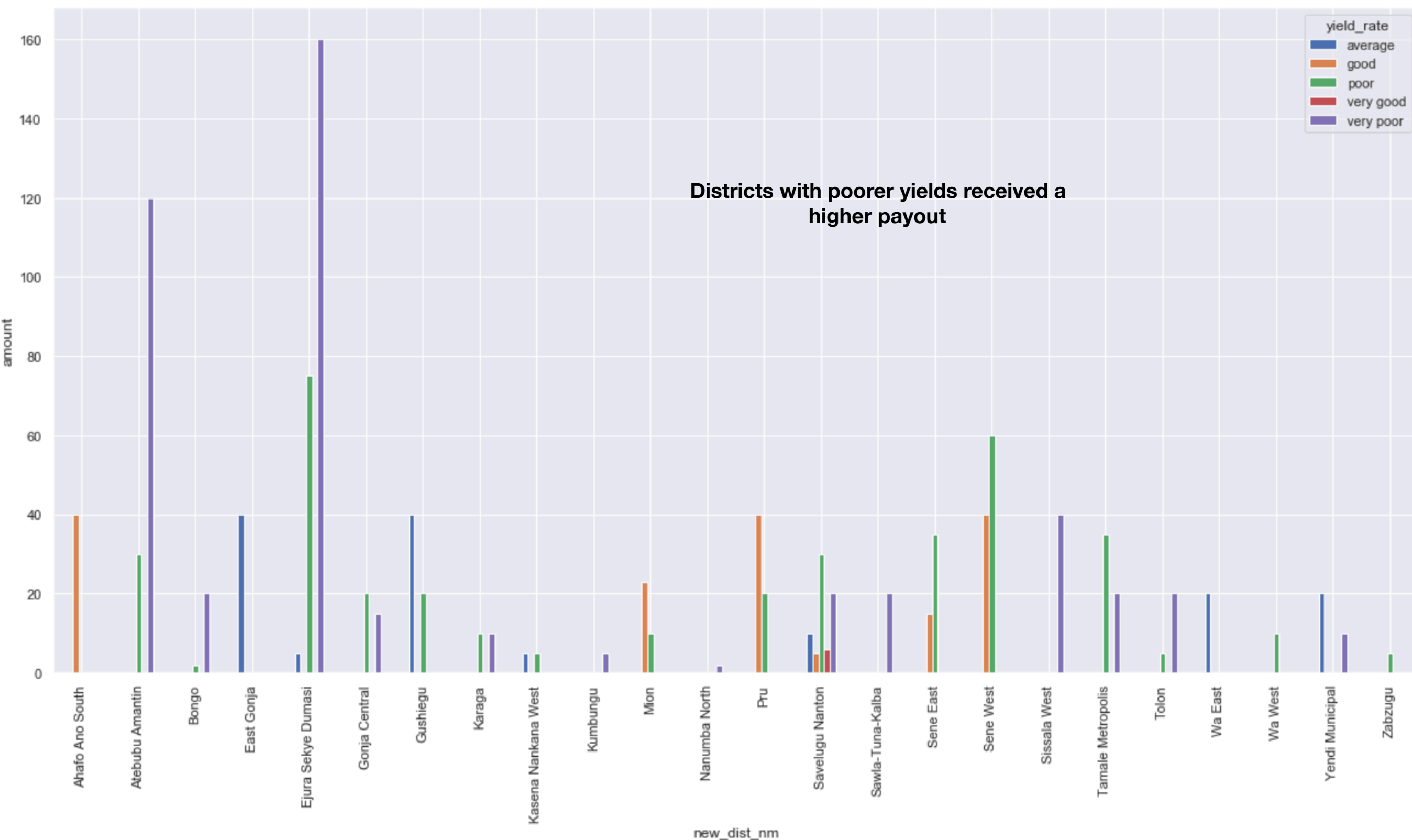
The districts with high poverty ratings had a higher average yield

Proportion of bad/good yields and insurance payouts

- 26 farmers reported bad yield and received a payout
- 9 farmers reported good yields and received a payout
- 13 farmers reported good yield and did not receive payout
- 22 farmers reported bad yield and didn't receive payout

**Assuming average yield is a good yield

Poor yields, High Payouts?



Trust the data?

- Part of the data is oversampled hence a bias exists in the dataset hence spike abnormalities in analysis, specifically for treatment groups and regions.

Conclusion

- For the 2019 season maize was the most produced crop
- Farmers affected by pest/diseases produced higher yields
- Districts with high poverty rates had more yields
- Male farmers had a high impact in yields