

equation $Y = 1 + 0.7216X$. A higher slope $B = 0.7216$ shows that without the fourth household, the society is more of the second kind, where each household have to work in proportion to it's consumption needs. That is higher the number of consumers in a household, they should have more acres.

3. The second regression line perhaps does a better job but according to me none of them really does a good job in characterizing the entire data. Because if we take the mean of the response variable, it's 2.162 and when we compare the values of error to it, they are not insignificant or low. Hence, both produce relatively high error and maybe simple linear regression is not the best fit for this data.

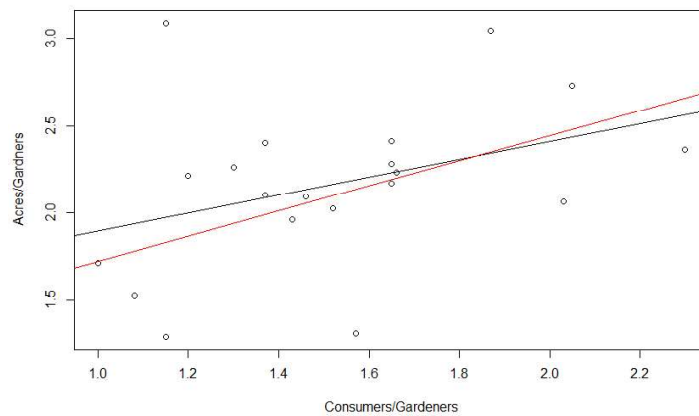


Figure 10: Scatterplot of response variable acres on explanatory variable consumers. The black line is a simple linear regression fit on the original data. The red line is a simple linear regression fit on the data without the fourth household