In Ghana, among other things, limited access to agricultural finance has remained one of the fundamental problems that hamper production, productivity and related agribusiness investments in rural communities and farm households. This study sought to empirically investigate smallholder farmer's accessibility to formal credit and constraints they encounter in the process. A multi stage sampling method was employed to select eighty farmers from Nzema East Municipality for the study. Descriptive statistics, logit regression model and Kendall's coefficient of concordance were used in analyzing the data. The output from the study indicates that 30 (37.5%) of the sampled farm households were formal credit users, whereas the remaining 50 (62.5%) were non-users. The empirical results from the logit model analysis of the study indicated that age, education, income levels, distance to the financial source, family size, credit awareness level and farming experience were highly important in influencing access to formal credit. Keywords: Credit Accessibility, Logistic Analysis, Nzema East Municipal