The purpose of this study was to investigate and analyze the factors influencing employee Performance Appraisal System (PAS) in the Ministry of State for Provincial Administration, Nyamira District, Kenya. Specifically, it was guided by the following objectives: To establish how the process of the PAS influences the system, determine how interpersonal relationship influences the PAS, determine how rater accuracy influences the PAS, determine how informational factors influence the PAS and establish how employee attitudes influence the PAS. The target population comprised 76 employees in the Ministry excluding the newly recruited employees. Census sampling technique was used, to obtain a sample of 76 employees which was the entire target population. The researcher used a descriptive survey design whereby a structured questionnaire was self administered to the employees to collect primary quantitative data. Data analysis was done using descriptive statistics such as frequency distributions and percentages. Multiple regression analysis technique was used to explain the nature of the relationship between PAS and the factors that influence it. Results of the study showed that all the five factors: Implementation Process (X1), Interpersonal Relationships (X2), Rater Accuracy (X3), Informational Factors (X4) and Employee Attitudes (X5) had a significant positive relationship with the performance appraisal system (Y) with standardized coefficients of correlation (beta) \( \beta = 0.601, \beta = 0.321, \beta = 0.123, \beta = 0.256, \beta = 0.314 \) at a significance level of 0.05 respectively. The regression results also showed that 55.1% of the variation in performance appraisal system can be explained by the changes in implementation process, interpersonal relationships, rater accuracy, informational factors and employee attitudes. The study implies that the policy makers charged with the PAS at the Ministry of State for Public Service, the Ministry of State for Provincial Administration and the Directorate of Personnel Management should have total commitment in making the process of conducting the process successful. The PAS should also value the employees and aim to treat them with dignity and fairness. The raters should also make accurate employee performance evaluations as inaccurate evaluations and ratings will not have the envisaged effect. Communication should be enhanced by holding frequent and compulsory meetings between the supervisors and the other employees to discuss the performance targets and progress towards those targets. The PAS should be made attractive to the employees so that they can value it as a tool that can contribute to their professional growth and upward mobility. This will in turn make them improve on service delivery and overall performance.