Increasingly, organizations are realizing that they have to establish an equitable balance between the employee's contribution to the organization and the organization's contribution to the employee. Establishing this balance is one of the main reasons to reward and recognize employees. Organizations that follow a strategic approach to creating this balance focus on the three main components of a reward system, which includes, compensation, benefits and recognition (Deeprose, 1994). Research has proven that employees who get rewarded and recognized tend to have higher self-esteem, more confidence, more willingness to take on new challenges and more eagerness to be innovative (Mason, 2001). However, like any other public organization, Kenya Ports Authority (KPA) despite establishing a compensation system to improve its employees, its employees have been criticised of being lazy, corrupt and that they lack professionalism in their work (Sarvadi, 2005). In addition, the performance of the organisation has not matched the demand of the growing economy. This is despite a competitive compensation system offered to its employees. This begs the question 'is there any relationship between the compensation system and the performance of the Authority?' Therefore, the aim of this study is to investigate the role that compensation plays in motivating employees and ensuring their job satisfaction, and thus uncovering the existing relationship between compensation and employee performance at KPA. Both descriptive and inferential statistics were adopted with a focus on both qualitative and quantitative characteristics and status of compensation and employee performance at KPA. The population of interest is all the 5,288 employees at KPA. A sample size of 580 employees was sampled using multistage technique for the purpose of this study. Primary data collected using questionnaire was used for the analysis. Measures of association using Pearson product moment correlation were used to examine the relationship between compensation and KPA performance. The result revealed that other than basic pay staff are offered house allowance, mileage allowance and mobile allowance. Further study findings indicated that staff is to a large extent dissatisfied with pay offered. Promotion and pension were highlighted as not contributing to improving KPA's performance. This result reveals that there is a statistically significant, direct and positive relationship between compensation and job satisfaction and motivation. In addition, the result indicates that there is a statistically significant, direct and positive relationship between compensation and organizational performance. Therefore, this study confirms that a total compensation management programme, which includes payment or compensation, benefits and informal recognition is required to optimise the motivation and satisfaction levels of staff which would result in increased organizational performance. Thus, the Authority could benefit by focusing on the compensation factors that positively impact employee motivation and job satisfaction.