



Research Article

INFLUENCE OF GREEN PERFORMANCE MANAGEMENT PRACTICE ON ENVIRONMENTAL SUSTAINABILITY IN SELECTED SERVICE BASED STATE CORPORATIONS IN KENYA

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ABSTRACT

Initiatives of Green management have become an important factor in businesses that are thinking ahead around the world. Researchers have argued that employees must be inspired, empowered and be made environmentally aware of greening in order for them to carry out green management initiatives. The study therefore sought to evaluate the influence of green performance management practice on environmental sustainability in selected service based state corporations in Kenya. The study adopted a descriptive design but specifically a survey which involved collecting data from five state corporations in order to test hypotheses of the study. The target population was the managerial staff in state corporations in Kenya. The sample size was 122 respondents; 22 top level management, 33 middle level management and 67 Supervisors/ line managers from five service based State Corporations in Nairobi. Multistage sampling was adopted to select the individual subjects randomly. Primary data was collected using a self - administered semi structured questionnaire while secondary data was collected from journals and databases. Pilot study was carried out to determine the reliability of the instrument while validity was tested through discussions with the supervisors and experts. Data was analyzed quantitatively and both descriptive and inferential statistics was used. Multiple regression model was used to establish the relationship between the independent variable and the dependent variable which are explained in the model. The results was presented in form of frequency tables and percentages. The study assists organizations appreciate and implement the relevant Green Human Resource Practices. The study found that green performance management practice had a high influence on environmental sustainability. It had a positive significance as shown by a coefficient of 1.006. The study recommended that state corporations in Kenya to adopt green performance management practices initiatives that are geared towards enhancing environmental sustainability in State Corporations in Kenya.

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INTRODUCTION

Green performance management is described as the process whereby companies manage the environment by developing environmental management strategies (Lee, 2009). It requires that company's needs should balance between industrial growth and safeguarding the natural environment so that future generation may thrive (Daily & Huang, 2011). This concept becomes a strategic dominant issue for businesses, especially multinational enterprises operating their business globally (Banerjee, 2011).

In summary, green performance management refers to the management of corporate interaction with, and impact upon, the environment (Lee & Ball, 2009), and it has gone beyond regulatory compliance and needs to include conceptual tools

such as pollution prevention, product stewardship and corporate social responsibility (Pullman *et al.*, 2012). Performance management programs are essential to guarantee the effectiveness of green management work over time because they guide an employee's performance to the environmental performance desired by an organization (Jabbour & Santos, 2008).

In addition, an effective way to successfully implement green performance management successfully is to link performance management with green job description (Mandip, 2012). Approaches to measuring green performance include adopting corporate-wide metrics for assessing resource acquisition, usage and waste; implementing information systems to track resource flows; and conducting field audits to provide employees opportunities to identify problems while gaining information and feedback about the green performance of the firm (Jackson & Seo, 2010).

Using performance management in green management provides the challenges to measure green performance

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standards across various units of the firm, and gaining useful data on the environmental performance of managers. Performance management can cover such topics as environmental incidents, usage of environmental responsibilities, and the communication of environmental concerns and policies (Renwick *et al.*, 2008). Performance management systems should be developed to include 'green' targets in the Key Performance Areas (KPA).

This can be translated into green performance standards and green behavior indicators which should serve as yard sticks in performance appraisal of employees at all levels. Green targets, goals and responsibilities should be established for managers and achievement of managers in accomplishing green results should be included in appraisals. Examples of such contributions can include creating awareness and familiarization of green issues amongst the subordinates, encouraging them to involve themselves in green activities of the company and facilitate environment management learning.

Those exceeding the standards maybe be identified as 'Green Super Keepers' (exceptionally talented employees) and allocated rewards based on their green contributions (Prasad, 2013). In the past, sound economic performance of the firm was expected to guarantee corporate success by companies and its shareholders, but now it is no longer valid; economic and financial outcomes need to be accompanied by minimization of ecological footprints and increased attention to social and environmental aspects.

Therefore, the new strategic issue, corporate environmentalism or green performance management emerged in and became a popular slogan internationally in 1990s (Lee, 2009). Business firms play a key role in the issues of green performance management since they are part of our society and cannot be isolated from the environment, and in fact, they contribute most of the carbon footprints in the past (Liu, 2010). It is considered that organizations should play an imperative role in addressing environmental issues since they are the main cause of environmental problems (Bebbington, 2011).

Organizations having good environmental reputation can have improved visibility, devoted employees, loyal customers, trusted suppliers and investors. Performance management is the process by which employees are prompted to enhance their professional skills that help to achieve the organizational goals and objectives in a better way. The recognition of the corporate strategy culminates into the PM. With the EM affecting global business strategy, PM is also being influenced by the green wave in a possible positive manner.

Green performance management consists of issues related to environmental concerns and policies of the company and also concentrates on the use of environmental responsibilities. Epstein and Roy (2007) in their study concluded that when HR managers integrate environmental performance into PM systems they safeguard environment management against any damage. Today some firms deal with the issue of PM by installing corporate-wide environmental performance standards, and Green information systems and audits to gain useful data on environmental performance (Marcus & Fremeth, 2010).

The most important aspect of performance management is performance appraisal. In addition to meeting the criteria of reliability, validity, and fairness, effective performance

appraisals provide useful feedback to employees and support continuous improvements in the firm's environmental outcomes (Jackson *et al.*, 2011). Issues involved in environmental PA concern the need for managers to be held accountable for environmental management performance in addition to wider performance objectives (Renwick *et al.*, 2013).

MATERIALS AND METHODS

Research Design

It described how green performance management influence environmental sustainability in state corporations, survey design was a preferred method because its analysis is primarily concerned with relationships between variables (Kothari, 2004). A similar study by (Jabbour, 2013) used survey questionnaire on 95 Brazilian companies.

Research paradigm

This study used the positivist research paradigm by setting up the hypotheses on the basis of the existing theories. The hypotheses was tested and confirmed or disproved by quantitative and statistical methods in order to answer the research objectives and accomplish the research purposes. The choice of a positivist approach was justified on the basis that the study was guided by theories from which specific hypotheses were drawn up that led to gathering of facts that provided the basis for subsequent hypothesis testing.

Research Duration

The research was conducted from March 2016 to November 2017.

Sampling technique

The study adopted multi stage sampling technique where state corporations in Nairobi were selected in stage 1. The service based corporations were randomly selected in stage 2. The 3rd stage randomly selected service based corporations whose mandate is on environmental conservation. The top, middle and lower managers were randomly selected from the selected service based corporations to get the respondents in stage 4.

The number of managers in Kenya Power were 356, Kenya Wildlife Service 210, Kenya forest service 185, NEMA were 86 and Nyayo tea zone 120. Proportionate distribution was used to get the respondents from the five state corporations. The researcher used simple random sampling to get the 22 top level management, 33 middle level management and 67 supervisors/ line managers.

Data Analysis

Data was analyzed by using statistical tests that depended greatly on the type of variables being studied. Both descriptive statistics and inferential statistics was conducted. This was done by computing the percentages, mean and standard deviation which assisted with the generalization of results. Multiple regression model was used to measure the relationship between the independent variables and the dependent variable which are explained in the model.

Green Performance Management Practices and Environmental Sustainability

The study investigated the influence of green performance management practices on environmental sustainability. The researcher further sought to find out whether the organizations

incorporated green performance management practices in HRM policies and practice, ways of incorporating green performance management practices in HRM and aspects of green performance management practices and environmental sustainability.

Analysis of whether the organizations incorporated green performance management practice in HRM policies and practice revealed that there was incorporation of green performance management practices in HRM policies and practices. A study by Renwick *et al.*, 2008 supports these findings as they suggest that performance management can be used in green management to provide challenges to measure green performance standards across various units of the firm. They concluded that performance management should be developed to include green targets in the Key Performance Areas (KPA).

The study further examined the ways of incorporating green performance management practice in HRM policies. The results indicated that it could be incorporated through setting of monthly green targets while some respondents indicated that it could be done through having annual green targets. Others indicated that it could be incorporated through performance contracting where employees sign performance contracts that capture the green issues of the organization. Green targets, goals and responsibilities should be established for managers and achievement of managers in accomplishing green results should be included in appraisals.

Examples of such contributions can include creating awareness and familiarization of green issues amongst the subordinates, encouraging them to involve themselves in green activities of the company and facilitate environmental management teaching, Lin & Ho (2008). The respondents were required to indicate the level of agreement to various statements relating to Green performance management practices and environmental sustainability using a scale of 5-1. Means greater than 1 and less than 1.5 implied that green performance management practice influenced environmental sustainability to no extent.

Means greater than 1.5 and less than 2.5 implied that green performance management practice influenced environmental sustainability to a little extent. Means greater than 2.5 and less than 3.5 implied that green performance management practice influenced environmental sustainability to a moderate extent. Means greater than 3.5 and less than 4.5 implied that green performance management practice influenced environmental sustainability to a greater extent. Means greater than 4.5 implied that green performance management practice influenced environmental sustainability to a very great extent. The findings are indicated in Table 1.

Table 1 Green Performance Management Practice and Environmental Sustainability

Green Performance Management Practice and Environmental Sustainability	Mean	SD
Incorporation of green performance indicators	2.96	1.43
Proper communication of green schemes	3.94	1.33
Managers set green targets, goals and responsibilities.	3.94	1.32
Integrated green criteria in appraisals.	2.90	1.35
Penalties for noncompliance on targets in environmental management.	3.87	1.44

N=110, S.D=Standard Deviation
Average mean = 3.52

The study sought to find out whether there is incorporation of green performance indicators into performance management system and appraisals, 26.2% disagreed to the statement indicating that a few state corporations practiced green performance management practice. The findings indicated that 28.2% disagreed that there was proper communication of green schemes while 22.3 % agreed to the statement.

The results showed that 26.2% disagreed that their managers set green targets, goals and responsibilities while 25.2% disagreed that state corporation has integrated green criteria in appraisals. The findings showed that there were penalties for noncompliance on targets in environmental management since 25.5% agreed while 21.6% strongly agreed to the statement. The average mean of 3.52 indicated that green performance management practice influenced environmental sustain ability to a greater extent and respondents agree that it influenced environmental sustainability. A standard deviation of more than 1 shows that the responses are moderately distributed, while less than 1 indicates that there is no agreement on the responses obtained. An average of 1.374 for all statements on performance management practice indicates that the responses are moderately distributed.

The study sought to find out ways in which green performance could be incorporated into HRM policies and findings indicated that majority of the respondents suggested that it could be done through setting of green performance targets for every employee while some suggested that it could be through documentation of performance policies. A study by (Jackson & Seo, 2010), is in line with these as they assert that Approaches to measuring green performance include adopting corporate-wide metrics for assessing resource acquisition, usage and waste; implementing information systems to track resource flows; and conducting field audits to identify problems while gaining information and feedback about the green performance of the firm.

H₀₄: Green performance management practice has no significant influence on environmental sustainability in selected state corporations in Kenya.

H_{a4}: Green performance management practice has significant influence on environmental sustainability in selected state corporations in Kenya.

Table 2 Overall ANOVA for Green Performance Management Practice and Environmental Sustainability

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10222.484	25	408.899	9.98	.000
Within Groups	3440.507	84	40.958		
Total	13662.991	109			

The results showed a significant difference in the means of the different green performance management practices in state corporations influencing environmental sustainability {F (25, 84) = 9.983, p = .000}. The null hypothesis was therefore rejected at 5% confidence level and the alternative hypothesis accepted. It was therefore concluded that green performance management practice have positive significant influence on environmental sustainability among the state corporations in Kenya. This means green performance management practices have been incorporated into the human resource management policies of the organization and therefore the environmental goals of the organization are met.

Managers in State corporations in Kenya should be able to carry out performance appraisal covering areas like environmental incidents and how well communication of environmental issues are done. When this is incorporated into performance management system in state corporations in Kenya, environmental sustainability will improve.

Discussion of Findings on the Relationship between Performance Management Practice and Environmental Sustainability

The study indicates that performance management practices have a positive effect on environmental sustainability among state corporations in Kenya with a coefficient determination of $(F(25, 84) = 9.983, p = .000)$. These findings are similar to those of Owino & Kwasira in their study on the influence of selected green human resource management practices on environmental sustainability in Menengai oil. They found a positive correlation between green performance management and environmental sustainability.

This finding implies that state corporations have embraced performance management as evidenced by the signing of performance contracts following a directive from the government. This puts the state corporation at a competitive edge. There should be incorporation of green performance indicators into the performance management system and appraisal so that as the individual employee works towards the achievement of their targets, overall environmental goals of the organization are met. These green performance indicators will be effective when there is proper communication of green schemes done to all levels of staff during performance management meetings.

Managers should be trained to set green targets, goals and responsibilities. Creating awareness and familiarization of these green issues amongst all in the organization is one way of encouraging them to perform the desired behaviors. A study by (Mandip 2012) indicates that, to successfully implement green performance management, is to link it with green job descriptions. This is an effective way to successfully implement green performance management successfully.

Measurement of employee performance in State Corporation should ensure that there are penalties for those who don't meet their environmental targets through things like low ratings during appraisal as this makes sure that every individual puts in effort to ensure that their targets are met. ISO 14001 environmental management systems model supports this findings since performance management ensures that EMS is effective and its analysis is done in line with performance of those employees who are taking up environmental responsibilities and this result in enhancing the environmental goals of the organization.

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