

A STUDY ON SUSTAINABLE DEVELOPMENT THROUGH GREEN MANAGEMENT

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ABSTRACT: Nature has provided us with limited resources on the earth. Environmental futuristic are blaming the industrial sectors as the major contributors for depleting natural resources and environmental degradation. So, the management now a day emphasis more to take utmost care in this field along with satisfying the market demands. To overcome the difficulties arise out of corporate operation a new concept has develop in the present globalized world where the planning, organizing, staffing, directing & controlling are carried effectively ensuring environmental impact. Green management is a way that includes improving environmental awareness, with the help of using natural energy resources and eco-friendly technologies, reuse and recycling activities always starts from the production to packaging and delivering to consumers. Businesses have now become aware that environment must be conserved and tended towards green management as a result of destructed and demolished environment will be reduced. Businesses have switched from traditional management mentality to environment-oriented green management. The objective of green management is to ensure operation activities be performed in accord with environment, to preserve environment in business objectives, visions and goals as well as operation functions, to enable continuous development, and to select technologies in accordance with sustainability principle. This research papers tries to investigate the ways through which organizations of modern times can become a better place. The paper also focuses on the strategies that need to be adopted by the managers to work towards making green organizations. Business professionals today working towards initiatives needed to reduce employee carbon footprints to become more accountable towards society and people's well-being. This paper tries to discuss the various initiates that can be taken by government to promote green practices in the organization to maintain sustainability.

Key words: limited resources, environmental degradation, Green management, sustainability.

1 Introduction

For several years, businesses are working out their functions by following general management systems but they are not giving importance to the environmental damage, the harmful gases are spreading vigoursly, damages caused by hazardous contents, problem arising from solid waste not paid much attention. Also with global warming, businesses are forced to direct their businesses towards green management which are focused on environment by giving attention on environmental damages. In the upcoming century, businesses produce environment-friendly products and will be to be able to carry on their existence, increase their profitability and productivity because they are in interaction with environment. Businesses will go green to decrease

the damages caused on environment. Along with eco-friendly productions, eco-friendly techniques, as they are giving importance to the protection of nature businesses gain boundary over their competitors. Almost every sector develops environment-friendly activities in themselves by means of different applications. Environment-friendly hybrid vehicles in automotive sector, producing papers which are suitable for recycling in paper industry, green star applications in tourism field, convenience for recycling of packing in food sector and production of environment-friendly productions can be counted as various activities which take place in green management focused environment.

There are factors and powers which encourage businesses to green management. Government

passed some rules and regulation to protect the nature with which we get encouragement. Government offers many privileges and grants for businesses which adopt green management. Businesses prioritize their matters adopting green management in their aims, visions, targets, tactics, strategies and politics.

The concept of green management and the application of green management in business functions are dealt in the research. The aim of the research is to analyze the success of green management in businesses, activities and green management visions of businesses. In this research, a business which is applying green management is dealt within the concept of case study from qualitative researching methods.

In this study, respectively the concept of green management, the aims of green management, the principles of green management, ISO 14000 environment management standards and green star, green managements applications in business functions, aim of research, importance of the research, methods of the research, case study and analyzing, conclusion and advices were examined.

What is Green Management

In the 21th century, businesses are making an effort for going green with the help of supplying environment quality of industrial system and regulations which are eco-friendly to be able to have success in national and international market and the businesses give importance on technologic developments which protect environment. Businesses are responsible to affect their environment by their activities to carry on their process, also they increase their productivities and contain their profit margin and at the same time they are affected by the environment. Although the interaction can show dissimilarity according to businesses, the interaction with environment can be the same level (Akatay and Aslan, 2008:314). Businesses carry on their actions along with the sense of environmental dependability. Businesses go round to green management and people gain a realization that environment should be protected as a result of environmental destroying which appears similar with economic and technologic developments, wrecking environment, hunger, scarcity in spite development level of communities, insolubility of universal problems.

Along with environment defense sense of environment, judging economic development concepts jointly and long dated turn businesses to green management. Businesses change to green management thought focusing on environment from customary management understanding. The management understanding which adopts businesses' defending natural sources, proper using of energy sources within the institutional concept and applications which are purified with sense of environment is called as green management (Goyal, 2013:70). Asya Productivity Organization defines green management as a approach which is applied to diminish the environmental effects of businesses activities by using environment management principles, vehicles and technologies and applied to increase general productivity and socio-economic development environment performance (Hosseini, 2007:222).

Green management composes the source of clean and green technology application development sustainability of environmental science to protect natural environment and sources and sustainable development means developing present abilities of next generations who can meet their own requirements by making no compromise (Sawant et al. 2013:5696). Green management should be in active together with environmental responsibility sense of businesses (Akatay and Aslan, 2008:318). The understanding of green management is a management which has ecologic importance by focusing on natural sources and environmental values. The understanding focuses on decreasing the wrecking of human power in the world and exploitation of natural sources and the sustainable development ideals should be more practicable together with green management understanding.

It can be said that sustainable development is the initial point of green management. Sustainable development bases upon thinking environment protection and economic development concepts together and long termed (Karabulut, 2003:44). Brundtland Commission defined sustainable development in 1987 as making no compromise on the ability of meeting the requirements of next generatons (Marcus and Fremeth, 2009:18). Sustainability means protection of the natural sources, increasing quality of human life, protection of bio variety, increasing sensibility against carbon and other chemicals and composing

recyclable waste management from production till packing. In this direction, businesses try to contribute for both their partners and sustainable progress by determining economic, social and ecologic benefits. The basic standard of the sustainable development is to protect natural sources by controlling usage and consumption. If the sources are continued on consuming unrestrainedly and unconsciously, society and businesses meet with source scarcity. Management should balance between waste and combination of the productions along with renewable and unrenovable sources (Akatay and Aslan, 2008:318). Businesses should start to give importance on activities which are suitable with green management by investing in green to be able to have balance. Businesses management focuses on usage of skillfull and subsidiary workers to gain profit in the name of businesses and management (Tran, 2009:22). By means of green management activities, developments in environment performance, works for diminishing contamination, green technology actions and environment sustainability with environment policy are long termed (Nogereda and Ziegler, 2006:6). The interests of organizations and governments to green management are increasing gradually and they are composing strategies in this direction. In this context, green management provides economic build-up, decreasing chemicals, more fertile usage of natural sources, decreasing emission volume, protecting environment, developing competition by increasing eco-effectiveness, intensifying the tie between local authorities and businesses and environment friendly production (Akatay and Aslan, 2008:319; Büyüközkan and Vardaloğlu, 2008:5; Karabulut, 2003:45). Green management applications are seen as disadvantages financially because of their costs. Green management has many advantages. It can be said that going green on has the merits such as increasing the reputation of the organization, lowering negative effects of the organization to the environment, less usage of energy sources usage, giving competition superiority against the other organizations and fulfilling demands of the other pressure groups ideally and reaching benefit to business.

Main focus of going green

While talking the profit of the partners, profitable development and earnings are becoming important among the aims of traditional management consideration, happiness of the partners, sustainability and life quality are also becoming major along with the aims of green management focusing on environment. Four aims are dogged for adopting green management by businesses. The aims are; (Karabulut, 2003:46);

- Organizations should control the effects of their activities to Environment.
- There should established politics, programs and aims regarding environment protection in the Organizations.
- Organizations should be aware of social responsibilities about environment and should train their personnel as environmentally-conscious.

The main point of green management are to take out business activities appropriate for environment, to safe guard environment and to provide a continuous development in aims, visions, targets, business functions, organization structure, functions, production processes, organization culture of the businesses and the businesses should regulate their activities by attaching importance on and fronting preference of technologies used in the business suitable for sustainability.

Alteration defines that the basic two aims of the green management are maximization of waste decreasing and source fertility. In this context, Makover declares streghtening, learning, activity and perfectness as four basic concepts (Hosseini, 2007:222).

The significance of attaining green management are providing continuity of sources by reasonable usage, protecting nature, decreasing nature destroying by recycling activities, disappearing harmful toxins to businesses and society, decreasing greenhouse gases emissions and stopping pale- climate (Marcus and Fremeth, 2009:18).

Green management- principles

In the 21th century, businesses have in progress to give importance on green management as outcome of environment problems appearing along with the effect of globalization by realizing problems and reparation and they adopted the green management principles. Works were started for adopting principles about the subject after gaining

importance of

green management. Deming makes researches on environment quality and defines green management principles as listed below (Karabulut, 2003:48-49);

- To provide aim continuity to minimize environmental damages.
- To gain competitive advantages.
- To give environment protection to production processes instead of cleaning wastes following by they appeared.
- To evaluate businesses by using criteria about environment protection and quality in the evaluation process.
- Precaution should be taken by determining environment problems.
- Giving training to the personals in the organization.
- To enhance the responsibility of the workers who work in production department as including environment protection, quality and decreasing wastes.
- Motivate the workers to think about the environmental protection.
- To set up organization and equipments that can provide the resolution of the problems about atmosphere to eliminate the barriers which can be among the departments in business.
- To afford required equipments about environment protection to personnel.

Environment protection should be paid attention while determining work standards.

- To facilitate the workers to be proud of promote which they provide for the nature.
- Managers should provide environment in which they can motivate workers about nature protection.
- To put forth a detailed education and progress program about nature protection to workers.
- Zell and Kurland determine 10 matters as green management principles after interviewing
- 30 managers who represent 20 industrial enterprises. (Zell and Kurland, 2011:49-56);
- Business managers should install their organizations on green values.
- Managers should prepare green targets and they should execute green management plans successfully.
- Managers should accord with sustainability

criteria.

- Business managers should make business statement analyze to apply green management.
- Business managers and personnel should surpass resistance on changing.
- Managers should strengthen sustainability applications and values in organization.
- Managers should pay attention on demands of suppliers.
- Organization should draw their customers and competitors' attention.
- Managers should have good communication with non-governmental Organizations, regulators and public opinion.
- Business managers should be seen always by workers in the business.
- Targets and visions must be instructive.
- Taking social, economic and ecologic systems and interactions into consideration
- Consuming sources without destroying by determining the basic factors in requirements of the next generations.
- Planning correctly the place and time of the activities which were done in the past and which are planned to be done in the future.

GREEN MANAGEMENT APPLICATIONS IN BUSSINESS FUNCTIONS

Businesses should carry out actions of green management in all functions of the businesses. If the businesses pertain green management activities in businesses functions successfully, they gain a great benefit over their competitors.

Green Management in Production Activities

The business which takes up the green management actions will use the technological skills which does not confer any harm to the environment in all their production activities. Businesses use clean production activities and eco- friendly technologies in production process in order to prevent source corruption and closed circuit production areas are established to wastes (Hosseini, 2007:223). The aim of the ecological consciousness in green management applications is evaluation of production from designing phase to recycling, reproduction and re usage phase (Büyükozkcan and Vardaloğlu, 2008:7). Usage of wastes by recycling and re appraising the wastes are given importance in the production activities. There are some factors

which businesses should fulfill to be able to include production activities in the light of green management applications. These factors are (Karabulut, 2003:53);

- To have the knowledge about how many raw material are used and at what rate energy is used in production process,
- to reduce the usage of raw material and energy which are used in production

Process and making necessary workings to prevent probably pollution,

- To lowering down the packing costs, using energy more productively and making productions suitable for recycling in production process,
- To use recycling packages during designing production by consumers.

7 criteria are determined by World Sustainable Commission in businesses which want to provide eco activity (Karabulut, 2003:54);

- To minimize the energy usage.
- To minimize the material usage.
- To maximize the recyclability possibility of productions
- To minimize spreading toxic substance
- To maximize the endurance level of productions
- To maximize service density

While businesses contribute economic development in their production activities, on the other hand they cause environment contamination by wastes. Businesses try to demolish the emergent wastes as giving harm to nature in minimum level because there is environmentally-conscious production among the basic aims of the green management activities. Businesses provide to collect wastes according to their classes by putting recycling boxes in waste storages. Providing effectiveness, using energy and sources densely in production systems technically are in the forefront in traditional management

Going green in Human Sources Management Activities

Green management applications can be performing well by participating workers to all activities about green management. Personals should have proper knowledge in environmental education. Management can ask questions which examine the environment protection. when they choose their personnel (Goyal, 2013:70). HRM chooses growing work

productivity as target in traditional management HRM chooses creating areas which provide health and safekeeping in working place in environment focused green management consideration. Businesses which have green management give trainings to their personnel about environment-friendly productions, sources which give and do not give harm to nature, pessimistic and optimistic effects of productions produced by the business, waste management, green aim, target and vision of the business. Personnel must be given training and informed about environment management to succeed human source management in green management activities. Environmentally-consciousness should be formed for personnel by trainings, conferences and orientations about the responsibilities towards nature, the negative effects of wastes which are thrown to nature, the appropriate places for the classification of the wastes for recycling, renewable and non renewable energy sources.

Various informative activities should be carried out in different places in business such as signboards, news, articles, signs about environment, caricatures which show the results emerged from environment protection and contamination to elevate awareness of personnel and to give weightage on environmental consciousness.

Going green in Marketing Activities

When going green is taken in to importance, environment consciousness is given importance and regulated. Selling, packing, pricing, labeling, promotion, distribution and advertisement of the produced productions take place within the scope of marketing activities in businesses. It is hard to continue the actions of green management for the businesses because suitable marketing strategies in green management are costs which provide profit in long term. For that basis, writing labels cautiously, education of the customers who use the production, introducing of the recyclable productions, retailers should have information about effects and contributions to environment of the production (Karabulut, 2003:66).

Businesses use supply chain in marketing of their production. The supply chain method contains planning, designing and controlling material and information flow from retailers to businesses and from businesses to customers through distributors

to be able to answer the needs of the customers efficiently (Büyüzözkán and Vardalođlu, 2008:4). It is necessary to control instantaneously each ring in green supply chain management and their suitability of environment should be controlled constantly. Green grants chain is a model in which combining, improving, developing strategies of producing environmentally friendly making and it is a model which empowers control mechanism, activates source usage, gives possibility to recycle of packs, creates value and explains importance. Green supply chain management is a management process incorporated with environment source and it contains designing production, choosing and supplying raw material and production process (Lintukangas et. al 2014:2). Businesses should be in environment focused activities such as green production and green packing throughout delivering the production and its all lifecycle (Rostamzadeh et.al 2015:189). Businesses which are active in world and Turkey give opinions to their customers about works to give cleaner and more liveable world to next generations, producing environment friendly products by minimizing environment destruction, effective using of source usage and recycling of productions in marketing strategies which are suitable for green management. Businesses inform customers by means of putting eco-label, environmental sign and recycling sign on products and they draw attention on their productions. The businesses such as Wal-Mart, Starbucks, McDonald and Motorola publish social environment responsibility reports within the context of social environment responsibility (Siegel, 2009:10).

Eco-label can be evaluated as economic vehicles which is based on volunteering supplying reliability about environmental registry of the production and services, participant, market based

(http://www.rec.org.tr/dyn_files/20/5926-III-EKO-ETIKET.pdf). It is aimed to give information to customers about designing, producing, using and marketing of environmentally friendly productions by means of eco label. While environmentally friendly productions are preferred, marketing, retention and promoting of the productions will be more effective. The sign of CE was adopted by European Union in 1985. To show European Union instructions of

the productions which are produced and sold in European Union the symbol of CE formed by the first letters of Conformance Européenne (Karabulut, 2003:68). The eco-friendly products with CE sign do not have any obstacle because they have right to move freely in European Union countries. Businesses put recycle symbols on packing of formed and presented products. The recycle sign represents that environmentally friend technology are used from the producing to packing of the productions and recyclable, packings are used. Businesses, public affairs and programs should provide objective verification to increase competitive capacity, to have environmentally friendly venture and to answer the increasing need of renewable energy development by adopting green management understanding (Boca, 2011:8).

Along with the environmentally friendly productions, businesses draw attention of customers, encourage them to buy the productions and have competition superiority over their competitors about marketing and promoting of the products. Marketing aims to consumption activities in general management understanding on the other hand, it aims to train customer in environment based green function. Businesses in examination field have the competition advantages adjacent to their competitors by featuring that they give importance on nature. Businesses raise awareness for customers by performing their green star certificate and the other certificates about nature security and by doing these, they can create a positive perception for the customers.

Green Management in Accounting Activities

Businesses should form environment based control mechanism to adopt green management and provide its sustainability. Green management accounting counts environmental costs and reflects to cost accounts of the businesses. Green management

accounting means adding costs which are done by businesses in order to protect nature in the financial process of businesses to cost accounts. Environment costs are defined as over stocking costs which will occur in business which uses unusual chemical materials in production progression, costs complete to demolish the pollution caused by harmful, dangerous and toxic wastes left in nature throughout producing

various products, invests on recycling and contamination prevention programs, costs for nature based guidance of personnel, suitability of legal regulations and investigate developing activities for nature and punishment and damages costs which businesses have to pay to people or other institutions as a result of depressing effects to nature (Karabulut, 2003:71).

Towards the end of 20th century, banks analysed businesses which had a claim for credit in the context of environmental risks while the banks decided to give credit the businesses. Banks had actions suitable for green businesses too. National Westminster Bank was the first bank which installed system on it and made environment control itself. Garanti Bank was seen suitable to take the World Environment price in 1996 by United Nations because of its environmental activities (Karabulut, 2003:71). A fast and unplanned tourism development as basic for economic development caused a fragile environment increasingly and it caused a risk for nature. Businesses which give magnitude on the issue and take part in service sector should act suitable for green management understanding in scheduling environmentally friendly, counting investment costs and suitability of touristic facility to nature.

6.5. Research-Development Activities in Green Management

The department of Research-Development is a department which is needed for developing new product, new services in businesses. The success of Research-Development activities depend on stepping to globalizing world, providing integration of business to innovations by following technologic developments. It carries out activities adopted by environment based management understanding by going beyond the standardized service activities in service sector. It can gain competitive advantages against

the other businesses in service sector by featuring the importance on nature by the activities such as advertisement, information, and marketing.

The units directing Research-Development activities carry out new projects to form less waste and contamination in production processes and technologies and develop new plan and strategies through works for declining energy and source usage (Karabulut,

2003:75). Businesses in service sector minimize the damage to nature by using new technologies in waste management system.

It is seen that R&D works supply great benefit to protect nature, minimize contamination and provide energy saving in businesses. They create new projects by methods such as recyclable boxes, panels which are demonstrating wastes and materials of which damages affect nature in long term, newspaper articles.

Personnel working in R&D department should develop new projects in their own businesses by constantly following innovations, developments in the sector in which they are effective. The businesses which follow and get in touch with innovations and developments have great advantages on energy saving, decreasing cost, increasing production, using source. R&D department researchers provide electric production by using the system of solar energy electric production in some parts of the businesses by following technology.

R&D department should integrate activities which are suitable for green management understanding to business by following environmentally friendly technologies and encouraging renewable energy source usage. The role of R&D department is great for development and success of the businesses used to gather data.

Findings and suggestions

Businesses have more value on activities regarding environment protection against increasing forceful environment destruction in 21st century. Businesses become more responsive on subjects such as eco- friendly productions, environment waste method based on environment, taking apart of recyclable wastes along with green management understanding. The green management applications can be successful by the participation of personnel and businesses to all activities about green management. The businesses are successful by continuous inspections and fulfilling the mandatory criteria along with government promotion in green management applications. Businesses expand competition advantages against their competitors and have difference in the eye of their customers by fulfilling required criteria and green management principles of the businesses.

The businesses which take over green management should conclude their aims, target, plan and strategic applications as meeting the demands of customers, complying with related law, rule or notices of government, public establishments and institutions. Green management application is important and authoritative vehicles which have an important role on success and progress of businesses.

There are benefits which are gained by businesses which carry out suitable activities to green management in service sector. We can array these benefits as;

- The packing systems of the kitchen products must be eco friendly.
- Wastes can be recycled to make it more useful.
- Cost can be decreased by utilizing the solar energy from the solar panel.
- Minimizing and disusing dangerous wastes and materials
- Business performance can be increased by following environmental regulation and environmental innovations
- Having competition advantage over competitors by adopting green management applications
- Choosing environment friendly technologies, being sensitive for buying environment friendly raw materials and profit increment as result of R&D activities by new projects which decrease contamination

Encouraging factors of the Ministry of Culture and Tourism with environmentalism understanding have played a significant job to express business to green management activities as a end result of researches and interviews carried out. It is cared while green management activities are integrated to business. Environment protection is provided by taking environment friendly products and using environmentalist technologic vehicles in Production field. It is observed that wastes are not left to environment and it should not give harm to nature by means of recording by holding following forms of concrete waste, oil and chemical wastes. The importance of the environment is explained by various informative activities to both guests and personnel. Saving energy and water are supplied by air conditioner systems which use low energy and give less harm to environment in rooms and in facility, preferring

sensor taps, applying energy card system in rooms, using sensor lighting, using solar panels. Certificates were given to personnel by trainings about environment. The paper usage in the facility was decreased by e-bill, electronic corresponding, and electronic check systems. Wastes were separated by putting recycling boxes to general fields. The importance which is given to environment activities was drawn attention by hanging environment policy in reception and environment panel in the facility. It is seen that the informing about environment to guests starts at the first moment.

The suggestions on green management principles which are effective for applying green management can be determined as;

- The Organizations or Businesses which really thinks that they are the parts of the society should determine aims and targets suitable for environment management system and environment protection.
- The information should be given to personnel about protecting, developing and improving of the environment in orientation trainings by the organization.
- Environmental protection act for waste management which is regulated by government institutions should be obeyed.
- There should be panels and signs in businesses about nature protection to raise consciousness for personnel and customers.
- Sustainability should be attained in the organization.
- Business should install systems against problems and negativeness about environment
- Businesses should encourage their personnel and customers to protect Environment with green management activities.

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