

**Going Green for Sustainable Development - A Study on Green Business
Practices of Restaurants**

*Muhammed Salim K C, Assistant Professor, Post Graduate and Research Department of
Commerce, Government College Madappally, Vadakara*

E-mail – salimmkc@gmail.com

Mobile -+91 8086107449

ABSTRACT

The realisation that the success of a business and its sustainability are deeply interconnected led to the development of green business among business corporations invariably. The concept of offering best services giving prime importance to the concept of healthier planet led to the global innovative idea of eco-friendly business strategies. We could visibly perceive the changing trend of massive cooperative mind-set to a sustainable trade practice. The main goals of green business include a healthy planet, prosperous people along with profit sustainability. Economic development with a concealed concept of environmental protection is the only way to ensure sustainable development of mankind. This article tries to explore various mean through which small and medium sized restaurants in Kerala achieve the goal of sustainable development through green business practices. Traditionally among the service sector, hospitals and restaurants are considered to be enterprises that has a key role in creating environmental imbalances through various pollutants. In the current scenario various innovative ideas have been incorporated to this sector as an outcome of public awareness, government initiatives and Corporate Social Responsibility (CSR) to overcome the deadly upcoming environmental challenges.

Keywords: Green Business, Eco-friendly practices, Sustainable trade practices, Service sector, CSR

Introduction

From the early period of industrial revolution there has been a massive exploitation of available resources which resulted in an alarming situation of scarcity of natural resources, the depleting reserves and environmental hazards. Various initiatives have been raised to counteract the situation and suggest a life- saving solution to protect the nature. Organisations such as ruling Governments, trade associations and international bodies like WTO, WHO,

UNESCO etc. works hand in hand to achieve the goal. The need of making industries eco-friendly was thus paramount significant. Various discussions and scientific analysis have been done to address this issue. Green business protocols can be successfully implemented in the enterprises to nourish the quality of environment along profitability.

Going green is the concept of reducing pollution and emissions that lead to ecological imbalances and greenhouse effect on the planet. Recycle, reduce and reuse are the three motos of going green concept. These universally accepted practices are suspected to reduce the burden of human activity, industrial operations and pollutants. Green management practices take steps to minimise the effect on environment through various upgraded and modified green technology tactics which are eco-friendly in all means.

The ethos of triple bottom line – people, planet and profit thus emerged in the corporate world. Hence it became important to make the business profitable without compensating the health and wellbeing of the planet and people including the employees and customers of the business. Ruling systems around the globe alone could not solve the environmental and social problems being overburdened with many economic and political issues. Hence it is the collective responsibility of each and every individual to protect our environment and fight against every measure that hampers a healthy planet. Green business have become the practical solution and sustainability is the new norm for a business. Eco-friendly concept of business has gained popularity in the minds of consumers and also created a trend in the market which has itself become a strategy for increased profit.

Some studies point out that two out of three and one out of six of every consumers in developed and developing countries respectively are green consumers. Green marketing evokes publicity towards green product and services among marketers and consumers in business and consumption habit. Even though the initial cost of introducing this concept is very high, a profitable future can be expected with the growing consumer attraction towards nature and natural products. Green business houses take voluntary steps to ensure good environmental practices promoting ethical and economic incentives to promote responsible attitudes towards environment

Kerala has globally attained significant image for sustainable development more than two decades ago. The Kerala model development has captured the attention of the world with respect to their social progress and peaceful social changes. With relatively lower per-capita income when compared to the other state, Kerala has proven their gallop in social progress

and market achievement in social indicators like high literacy, high life expectancy and low infant mortality rate. Even though the euphoria around Kerala model development has largely been dismissed as unsustainable, Kerala based firms are exploring new avenues of sustainable development through their focus on going green. As per state report 2019 by India Today, Kerala focus on green living pays a considerable portion to the tourism flock of the green state despite of the state being struck by natural calamities in the recent years. Despite of rapid urbanisation Kerala still breath freely and maintain its green cover well protected. As per the latest economic review data the environmental quality indicated that the level of Sulphur Dioxide, Oxides of Nitrogen and particulate matters remain within the permissible limit.

Objectives

This is study conducted to examine and evaluate existing eco-friendly green business practices of small and medium scale restaurants in Kerala. A wholesome model of evaluation was carried out to know the practices followed by customers, employees and management. Study was held to suggest some criteria for assessing existing green practices and develop a model that will help them to cop up with international practices in the similar sector. Study provides certain suggestions to tackle shortcomings of the practices followed, so as to follow some feasible eco-friendly practices.

Key objectives of the study include the identification of existing practices followed for managing biodegradable and non- biodegradable waste and to suggest measures for better management of wastes. This study also aims at efficient water management practices including rain water harvesting, water recycling and flow regulatory mechanism of existing pipelines. This study also assess the shifting towards the practice of sustainable food and the usage of natural furnishing and building materials. This study also emphasis on energy conservation techniques and usage of eco-friendly disposables. This study also focuses on various practices to reduce pollutants and hence ensuring the conservation of nature. Ultimate aim of this study is to stimulate self -innovations of eco-friendly practices and influence customers to become more conscious about environment.

Review of Literature

Earth Summit of (1992) held in Rio, Argentina has become the venue for conceiving the concept “Sustainable Development”. All the delegates around the globe who attended the summit stood together upholding the new concept of saving the environment for the future generations.

Gustine and Weaver (1996) carried out a study to identify customers’ interest to occupy and stay a night in a hotel with eco-friendly environment. Findings of the study show that there are three components in the environmental behavioural model, which have a positive relationship with intention to stay. It was the first step to identify what customers are really thinking about green practices and their expectations for such practices in hotel industry. Study also paved the path to a new beginning for the hotel managers to stress on green practices and its demand among the customers.

Chad Holliday (2001) stated in a research paper that green practices in restaurants directly can direct the organisation to huge profit. All the firms must follow a policy of sustainable development for the long-run through the implementation of green practices and they must adopt strategies to overcome the challenges in achieving this long-term goal. Study suggests that profit motive should not lead to hike in social cost.

Charles W. Lamb (2004) explained in his studies that green business practices have got popularity as a way for businesses to create loyalty and environmental awareness in the minds of customers by raising a sensitive issue. Positioning of product as environmentally efficient and eco-friendly is also a useful tool to show the commitments towards environment and society as a whole.

Choi and Parsa (2006) investigated the attitude of restaurant managers to engage in green practices. They conducted this study to identify the relationship between psychological attributes of managers and their involvements in green practices. They were trying to examine restaurant manager’s attitudes towards ecological behaviour in hospitality and managers’ willingness to charge a higher price for a socially responsible practice. Result of the study reveals that managers are against charging a higher price for a socially responsible practice and it has significant influence on their preferences and involvement in such practices. This study also concludes that green practices were composed with three perspectives: health, environment and social concerns.

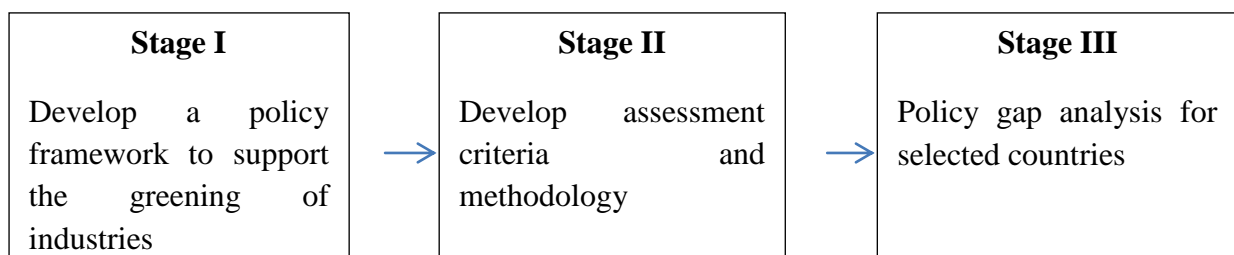
Ben Tran (2009) in his study concluded that going green is not about repackaging but it includes re-inventing approaches to business. It is not a new style of management but simply

becoming more thoughtful how the organisations treat their environment when they perform regular operations. From the corporative perspective, green management matters only with in the triple bottom line i.e., environmental benefits, positive economic effects, and healthy social images.

Philip Kotler (2011) has opined that all the firms on the globe have to make a complete reengineering in their operational activities including production, promotion, finance and, research and development activities in order to attain the goal of sustainable development. The ultimate aim of this process are reduction in change of climate condition, protection of ozone layer, reduced global warming, soil degradation, and environmental pollution.

A Kasim and A Ismail (2011) have conducted an analytical study that examines the internal and external motives and barriers that may influence responsiveness of restaurants towards implementation of eco-friendly practices. Study was conducted to determine employees' role in implementing green practices, cost incurred and the involvement of top management. This study also sought to determine whether the external organisational factors like rules and regulations, green supply chain, market advantages and stakeholders' minds are responsible to implement green practices. The conclusion hence produced Acted as a base for implementing environmentally friendly practices among restaurants in casual upscale segment.

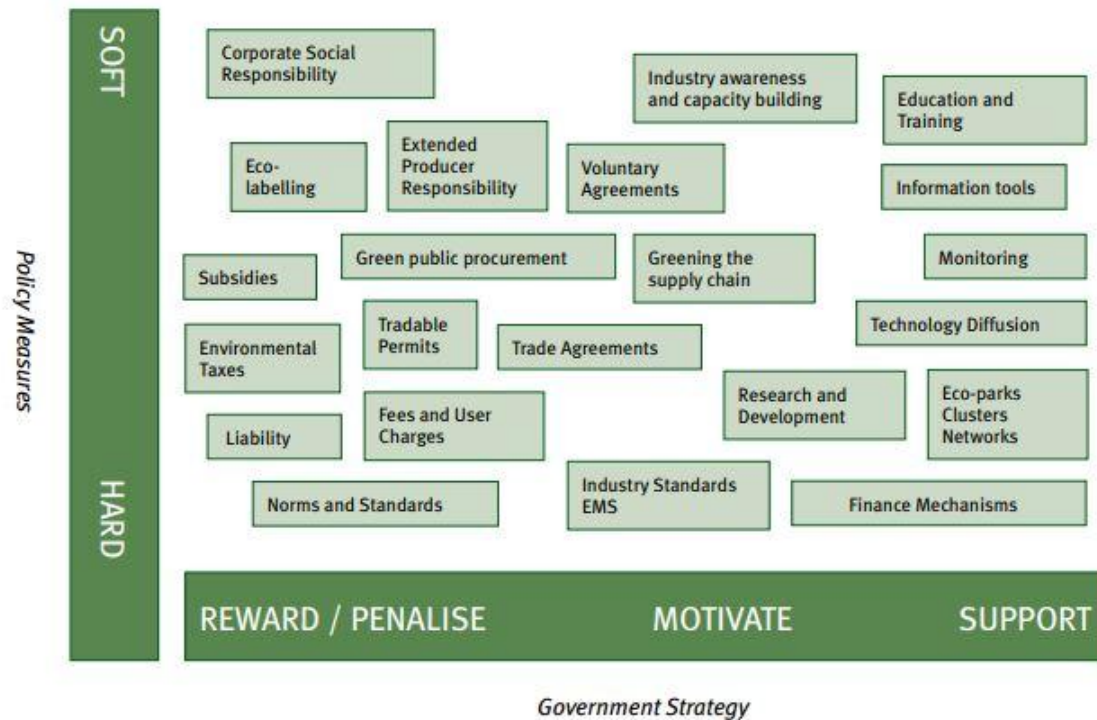
UNIDO Green Industry Report (2011) suggested a three stage model, illustrated in Fig.1 given below, for supporting Governments of developing countries to frame policies and institutional regimes for the better conduct of green business practices.



Source: UNIDO Green Industry Report 2011

UNIDO Green industry Report (2011) suggests a blend of hard and fast measures, as given in Fig.2 below, for implementing green practices. Actions like rewarding or penalising and motivation or supporting are required for implementing the strategy. Hence a sweet and swore approach would be mandatory to achieve the goal of green business.

FIGURE 1: POLICY MATRIX FOR THE GREENING OF INDUSTRIES



Source: UNIDO Green Industry report-2011

Methodology

This study was conducted in 50 restaurants having substantial operations which were randomly selected from three districts of Kerala namely Kollam, Ernakulam and Kannur. The 50 restaurants include 15 large scale operators and 35 medium scale operators from the selected segment. A self-assessment questionnaire was distributed among restaurant managers to analyse various eco-friendly practices followed by them in restaurants. Assessment provided valuable inputs about environmentally sound practices followed by restaurants in Kerala. Along with self-assessment questionnaire given to restaurant managers, the researcher also observed and analysed various green practices at each restaurant before arriving at a conclusion.

Observations, Analysis and Discussions

Eco- friendly practices in the restaurants were collected through the self-assessment report filled by the restaurant managers. Criteria proposed by Green Restaurant Association, USA were used for arranging the items in the self-assessment report. These criteria are given in Fig.3 below. The eco-friendly behaviour of restaurant were assessed based on the report collected from restaurant manages and the observation made by researcher in the randomly selected samples.

CRITERIA USED FOR ASSESMENT
✓ Water Efficiency
✓ Waste Reduction and Recycling
✓ Sustainable Furnishings and Building Materials
✓ Sustainable Food
✓ Energy
✓ Disposables
✓ Chemical and Pollution Reduction
✓ Transparency and Education

Source: Standards fixed by Green Restaurant Association, USA

Owing to the analysis of self-assessment report and the observation made by the researcher, the following are the major green practices identified. Their shortcoming and suggestions to improve the quality of green practices are included along with the study.

Water Efficiency

Considering the criteria ‘water efficiency’ the following practices were identified.

- i. Even though most of the restaurants have poor rain water harvesting system those with this facility are very efficiently using this harvested water for various purposes other than cooking.
- ii. Low water landscaping practices were found in only two restaurants. Most of the restaurant are situated in shopping complexes and near to national highways or along other major roads and hence doesn’t possess enough area for arranging low water landscaping system.

- iii. Most of the restaurants promote rational use of water and flow rates are regulated in kitchen sink, washing sink and in restroom. Low consumption devices and flow reducers are installed everywhere.
- iv. Even though physical facility of waste water treatment is installed in 80 % of the restaurants only 50% of them put into use. And among them 30% of them are using recycled water for purposes other than cooking.
- v. All the restaurants are regularly monitoring their rain water harvesting system, plumping mechanism, flow regulators and waste water recycling plants, and ensuring frequent maintenance.
- vi. The restaurant managers are aware of the necessity of water treatment and water testing to check the level of contamination with various microbes which may lead to food poisoning and are frequently practicing the same.

It is recommended that all the restaurants must have rain water harvesting system and waste water recycling plants. Most of the restaurants have automatic sensors to dispense water in wash area, but is found to waste water for a few seconds even after the use is over and hence it is recommended to fix more efficient water dispensers and flow regulators.

Waste Reduction and Recycling

The major practices and concerns regarding waste reduction and recycling are as follows.

- i. All restaurants are segregating their waste as biodegradable and non-degradable in the origin itself.
- ii. No restaurants have technology to recycle non- biodegradable waste. Most of them have contract with outside agencies for disposing these wastes. Only few restaurants have their own incinerator for disposing non-biodegradable waste
- iii. Most of the restaurant work in allied with pig farms and firm making organic fertilizers for disposing organic food waste.
- iv. It is observed that majority of restaurants are providing disposable napkins to customers and they are using it without any limits. Plastic and aluminium foil containers are also used tremendously.
- v. 7 restaurants have tie-up with some charity organisation for donating balance food in good condition.

It was found that a lot more could be done by restaurants with respect to their food waste management. They could use the services of an authorized waste management company for disposing and recycling of the food waste. An integrated waste management system is absent in the most of the restaurants. Restaurants may also adopt strict policies while procuring various items from the suppliers and reusable containers and package materials can be encouraged for supplies. Parcel counters may use minimal packaging materials and promote natural reusable containers for delivery. Latest innovations in natural food package materials and food servers can also be adopted. Reusable towels and serving materials can also be promoted.

Sustainable furnishing and Building material

The key points regarding sustainable furnishing and construction of outlets are:

- i. All the restaurants are operating in long lasting structures.
- ii. Most of the construction in Kerala do not consider the available environmental resources and hence mismatching with the concept of sustainability and conservation. This is the same with the restaurants under study.
- iii. It is also observed that few restaurants are frequently renovating their interior and exterior styles. This may lead large volume of harmful wastes which has negative impact on the concept sustainability.
- iv. No consideration is given for sustainability or green practices while furnishing inside in the case majority of restaurants.

It suggested to have a long lasting structure while constructing building and Government should implement strict rules and regulations for following sustainability while constructing buildings. Frequent renovation can be avoided, so that hazardous waste of construction materials can be reduced. Eco-friendly long lasting items can be purchased for furnishing inside of restaurants.

Sustainable food

With respect to food sustainability following practices are identified in restaurants.

- i. Traditional foods are served in most of the restaurants, but there is no initiations from restaurant's side to use locally or seasonally available ingredients.
- ii. No hotels have preferences to use organic farm fresh food ingredients, which avoids use of harmful pesticides, chemical fertilizers and genetically engineered food crops.

- iii. Artificial flavours, colour, chemicals, pulps and taste makers are commonly used in all restaurants. Most of the Chefs are not aware about limit for using such food addictive with added preservatives and chemicals.
- iv. Food of animal origin and fish species are common in menus of all non-vegetarian restaurants, Overs use of meat product and overfishing are greatest threat to our environment and marine wildlife.
- v. There is system for preferring certified products in restaurants; but their procurements are based on availability, price and credit terms.
- vi. It is also observed that both the customers and restaurants are least bothered about healthy way of cooking and eating.

Strict awareness should be given to Chefs and helpers regarding the food safety and usage of various taste makers and preservatives. Green practices of using organic food ingredients and packaging materials should be promoted. Consumers must also be made aware of the ill effects of unhealthy food culture and eating habits and the need for following sustainable healthy food culture.

Energy

Following are the findings regarding energy – its usage and conservation

- i. It is observed that chefs and kitchen staffs of restaurants are not trained to use good kitchen practices for energy conservation. through proper training of good kitchen practices, restaurants can save significant amount of power, LPG and money.
- ii. Thermostats and Air-conditioners are seen constantly working in a fixed mode despite of manual adjustments based on requirements.
- iii. Most of the restaurants have purchased equipment and machines with energy efficient standards without considering their needed requirements of the same
- iv. Even though all the restaurants have enough quantity of food waste to produce natural gas, none of them have installed a bio-gas unit along with the structure..
- v. All restaurants are using energy efficient lighting system and lighting adjustments are frequent to reduce energy consumption.
- vi. Only two restaurants make use of renewable solar energy, but low capacity devises installed are not able to meet the sufficient requirements of energy.

Surprisingly some studies reveal that restaurants are consuming 2.5 times more electricity per square foot than any other commercial building. Moreover they are the

largest consumers of LPG also. Measures should be taken to regulate and control use of electricity and to promote use of solar energy. Training must be given to all restaurant staffs to follow good kitchen practices, which help us to attain the goal of sustainability. Government regulations must be brought to avoid usage of power for unwanted decors and attraction.

Reusable and Environmentally preferable disposables

With respect to reusable and environmentally preferable disposables following practices are identified in restaurants.

- i. Reusable utensils and dishes are used for dine in customers.
- ii. Use of disposable utensils, straws, coffee filters and tea bags are strictly regulated
- iii. Few restaurants are using chalkboard for displaying their menu.
- iv. Sustainable chef coat, staff uniform and table cloths are used in most restaurants.

Billing and other transaction can be made digitally transmitted to mobiles via SMS thereby avoiding printed papers and chemical inks. Usage of menu cards and offer flyers can be replaced by attractive digital displays.

Chemical and Pollution Reduction

Another major concern regarding green practices is the various pollutants hampering the environment and the major remedies that can be followed in reducing it.

- i. Cleaning agents containing low level of caustics are used by the restaurants and they are bought in small quantities. Access of its storage is limited to concerned staff.
- ii. All restaurants are using multipurpose cleaners, rather than special purpose cleaners.
- iii. Artificial colours, pulps, vegetables pastes, fruit pastes and oils are largely used for cooking. Products having industry standard are used in this category. There is no restriction from chef's side for limiting quantity of these items.
- iv. Through practicing good housekeeping system restaurants are able to control pest population and hygiene standard without using harmful chemicals and pesticides.
- v. Most of the restaurants are keeping kitchen grease in separate containers supplied by rendering companies and avoiding disposing them to drain. This practice helps to minimize clogging of pipeline and use of toxic chemicals to clean the drain.
- vi. Parking bays are available in most of the restaurants and vehicles can be parked without waiting and this will help to reduce fuel consumption. Delivery of orders is well planned arranged systematically to avoid frequent trips thereby saving fuel consumption.

Procurement of cleaning agents in small quantities should be discouraged to avoid accumulation of empty plastic bottles. Usage of Chemicals with specific industrial standard should be ensured. Considerable amount of fuel consumption and pollution can be reduced by installing solar inverters instead of power generators to meet the requirements due to power interruptions.

Transparency and Education

Existence of transparency and education in green business practices of restaurants can be summarised as follows.

- i. Only two restaurants have displayed their eco-friendly practices in a visible corner of dining area or visitors launch.
- ii. Seven restaurants have mentioned their green practices of food preparation in menu.
- iii. Among all, three restaurants have displayed certain quotes indicating importance of green practices and traditional healthy food habit.
- iv. Five restaurants have green logos and tag lines in display boards, napkins and in staffs uniforms
- v. No restaurants have provided training on green practices to its employees.
- vi. No restaurants have a certification on green practices
- vii. A few restaurants have a small garden
- viii. No awareness is provided in any of the take a way counters to bring containers for food or on threat of using disposable containers.

Display boards regarding conservation of environment and protocol of eco-friendly practices shall be displayed for public awareness. Maintaining greenery both interior and exterior helps to attract customers along with promoting the message of sustainability. Charging high prices to avoid the usage of non- biodegradable packing materials can itself reduce the temptation of using such disposable food containers. Awareness campaign to ' go green ' can imparted to management, staffs and public

Conclusion

As a whole, the study conducted within random samples of fifty restaurants throws light on existing practices that are followed in restaurants operations, giving due importance to various measures that can be adopted to enhance green practices in restaurants. A mandatory green certification and standards must be implemented in restaurant sector to maintain quality and sustainability. When new restaurants are issued licence with mandatory green

certification the existing firm should be provided a stipulated time to shift themselves achieve these standards.

By various strategies to overcome the lacuna in eco-friendly business management practices we could ultimately achieve the goal of green business, conservation of nature and sustainable use of available resources hence preserving it for up-coming future generations. Here forth realising the importance of nature and healthy food habit, the concept going green for sustainable development has an astonishing role in business practices.

References

1. United Nations Conference on Environment and Development Rio de Janeiro, B. (1993). *Agenda 21 : programme of action for sustainable development ; Rio Declaration on Environment and Development ; Statement of Forest Principles: The final text of agreements negotiated by governments at the United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil.* New York, NY: United Nations Dept. of Public Information
2. Renwick DWS, Redman T, Maguire S.(2013) *Green Human Resource Management: A Review, and Research Agenda*, International Journal of Management Review.; 15:1-14
3. Kotler. P. (2011). *Reinventing marketing to manage the environmental imperative.* *Journal of marketing*, 75(4), 132135. <https://doi.org/10.1509/jmkg.75.4.132>
4. Choi, G., & Parsa, H. G. (2006). Green Practices II: Measuring restaurant managers' psychological attributes and their willingness to charge for the "Green Practices". *Journal of Foodservice Business Research*, 9(4), 41.
5. Gustin, M. E., & Weaver, A. P. (1996). Are hotels prepared for the environmental consumer? *The Council on Hotel, Restaurant and Institutional Education*, 20(2), 1-14.
6. AzilahKasim&Anida Ismail (2011): Environmentally friendly practices among restaurants: drivers and barriers to change, *Journal of Sustainable Tourism*,DOI:10.1080/09669582.2011.621540
7. Rutherford, R., Blackburn, R.A., & Spence, L.J. (2000). Environmental management and the small firm: An international comparison. *International Journal of Entrepreneurial Behaviour & Research*, 6(6), 310–326.
8. Calling green: Green business definitions and opportunities accessed. Available on, 2011,<http://www.cgforestaccountorg/greenbusinessdefinitionsandopportunities.html>.

9. Hirsch, Dennis, *Green Business and the Importance of Reflexive Law: What Michael Porter Didn't Say* (February 8, 2011). *Administrative Law Review*, Vol. 62, No. 4, 2010. Available at SSRN: <https://ssrn.com/abstract=1758102>
10. UNIDO (2011). *UNIDO Green Industry: Policies for supporting Green Industry*. Vienna: United Nations Industrial Development Organization (UNIDO)
11. Kassaye, W.W. (2001) Green Dilemma. *Marketing Intelligence & Planning*, 19, 444-455. <http://dx.doi.org/10.1108/EUM0000000006112>
12. www.dinegreen.com
13. Prithi Rao, and Aithal, P.S. (2016). Green Education Concepts & Strategies in Higher Education Model. *International Journal of Scientific Research and Modern Education (IJSRME)*, 1(1), 793-802. DOI : <http://doi.org/10.5281/zenodo.160877>
14. Aithal, P. S. and ShubhrajyotsnaAithal, (2016). Opportunities & Challenges for Green Technology in 21st Century. *International Journal of Current Research and Modern Education (IJCRME)*, 1(1), 818-828. DOI : <http://doi.org/10.5281/zenodo.62020>.