



SUSTAINABLE FOOD PRACTICES FOR HOLISTIC TOURISM DEVELOPMENT

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ABSTRACT

Tourism is one of the world largest industry of which hotels are the major stakeholder. Hotels cater accommodation and food to the tourists. In tune with sustainable tourism, hotels are also going green. They are following environment friendly practices to get a competitive edge. The present sustainability idea originated in 1970s and it took 1987 to Brundtland commission to outline holistic concept of sustainable development in its report. The goal of Sustainable Development is clearly secure economic development, social equity, and environmental protection. Food is one of the basic necessities of tourists. Food is symbolic to a destination and an important motive for tourism. We are more concerned about sustainable tourism but without providing sustainable food; tourism cannot be sustainable. Indian Vedas has understood the importance of food & sustainability thousands of years back. Bhagavada Gita in its seventeenth chapter categorized food in its own way. The ancient sustainable practices focused on safety, quality and waste prevention of food leading to healthy mind & soul. . Safe food and ecofriendly hotels are the emerging international practices in hotel industry and these could be vital for sustainable tourism. This paper is a maiden attempt to present the concept of sustainable food and explain emerging practices and law that can ensure sustainable food.

KEYWORDS: Tourism, Sustainable Food, Food Safety &Quality, FSSA, Codex-HACCP, ISO 22000

INTRODUCTION

Tourism is recognized as one of the world's largest industries and continues to expand at a rapid rate (UNWTO 2006). Over 922 million people travelled in 2008 and it is estimated international tourism will increase to 1.1 billion by 2020 (UNWTO 2008). Tourism is also a profitable economic endeavor, making it an economically enticing industry and a form of development for many countries around the world. However, the benefits of tourism are often accompanied by many negative environmental and social impacts. The World Travel and Tourism Council identified nine priority areas for action by national tourism organizations and industry-based associations or organizations. These included

1. Assessing the capacity to bring about sustainable tourism planning for sustainable tourism development,
2. Planning for sustainable tourism development, and
3. Measuring progress in achieving sustainable development.

Tourism is primarily a business. As the WTO states:

“It is important to ensure that ecotourism is a good, economically sustainable business and that profits are generated from it. If there are no prospects for profit, then private entrepreneurs will not invest and there will be nobenefits to distribute for local communities or conservation purposes” (Vereczki 2002).

The hotel industry forms a large part of the tourism industry and if not managed properly, it has the potential to be detrimental to the social and natural environments within which it functions. Hotels are also resource intensive and in order to reduce their impact, it is imperative to go "green!" The consumers using hotel services are conscious about environmentally friendly practices in India. They patronize the hotels that have adapted green practices though not compromising on service quality. The consumers would prefer to use lodging that follows these practices but are not willing to pay extra for these services. Indian hotels have the competitive advantage over similar products if they follow green practices. The hotels would have to invest in environmentally friendly practices and look at long-term gains. The government needs to acknowledge and institutionalize the practice by instituting rewards and offering benefits in taxes (Manaktola K. &Jauhari V.2007). Food is one of the basic necessities of tourists which hotels cater to. Cuisines &gastronomy are important attraction which tourists are looking at a destination. Food is symbolic to a destination and an important motive for tourism leading to new concept-gastronomic tourism. Even within a city people love eating out. There has been drastic change in life style of common folk in this modern age; Youngsters such as college goers and professionals are compelled to take at least a meal outside home. This has brought revolution into

hotel industry and it is certain that food is going to focal point in the era to come. So, tourism is going to be food centric. As we are more concerned about sustainable tourism but without providing sustainable food; tourism cannot be sustainable. Indian Vedas has understood the importance of food & sustainability thousands of years back and expressed –“Annam Brahma- Food is the supreme Brahman’ is the famous statement of the Taittiriyoanisad. The foods tradition in India developed over a period of more than five thousand years. Hence, Indian tradition of food is far superior to western tradition ,since it is holistic studied thoroughly not only from the point of spiritual emancipation but also from the point of view of creating peaceful and healthy society in which every human being is enlightened, sober, peace-loving and healthy.(Lakshmithathachar M.A,2000). Bhagavada Gita in its seventeenth chapter clearly categorized food into:

Satvika food- it promotes mental vigor and causes knowledge.

Rajasik food- it is bitter, sour, saltish, excessively hot, pungent burning. Such foods are consumed by persons who have got Rajas in the ascendance. It causes pain, grief and disease.

Tamsik food- it is stale, tasteless, putrid and rotten. It is left over and unclean foods. This will cause lethargy and sleep. So, focus was on safety, quality and waste prevention of food leading to healthy mind & soul as several texts in Indian Ayurveda testifies. This ancient Indian practice is the essence sustainable food. Food safety management system as well as food legislation ensuring quality& reducing wastages is mandatory requirements for ensuring sustainable food. Reduction of food wastages will ensure availability of wholesome food to the large population of world facing drastic shortage of food.

NEED & OBJECTIVE STUDY

The brief review of existing literature on related areas points the absence of comprehensive and intensive study touching on these aspects of hoteliering as yet. However, in regards to other industries, a lot of scientific and detailed studies have been undertaken by researchers and institutions. It has been unfortunate that hotel business has not been able to draw the attention of researchers to any noticeable extent barring few by hotel association and institution to draw attention of government towards their problem. Paucity of data is a bottleneck for refraining researchers from undertaking in depth study. Safe food and ecofriendly hotels are the emerging international practices in hotel industry and these could be vital for sustainable tourism. Further focus on practices and law that can ensure sustainable food is a maiden attempt to explain this concept.

SUSTAINABLE DEVELOPMENT: AN OVER-VIEW

Sustainable Development is a holistic concept based on a simple principle. As outlined in the 1987 Brundtland report, the concept involves “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” The sustainability idea

originated in the 1970s (WCED 1987) . The first international meeting that tackled the impact of human activities on the environment and eventually their impact on the human race was the 1972 UN Stockholm Conference on the Human Environment. In 1987, the Un-sponsored Brundtland Commission released *Our Common Future*, a report that captured widespread concerns about the environment and poverty in many parts of the world. The Brundtland report said, in part: “Economic development cannot stop, but it must change course to fit within the planet’s ecological limits”. It also popularized the term Sustainable Development (SD).

“Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems” (WTTC 1998).

The 1992 UN Conference on Environment and Development (also known as Earth Summit 1992 or the Rio Summit) again brought environment and development issues to the forefront. It produced the Rio Declaration on Environment and Development, which added the principles of intergenerational equity, citizen participation, and empowerment of women, youth, and indigenous peoples. Its accompanying “Agenda 21: Program of Action for Sustainable Development” identified ways by which various stakeholders can operationalize the actions called for by the document on a wide range of issues. Attended by leaders from government, public interest groups, nongovernmental organizations, as well as private business, Earth Summit 1992 generated a high level of public awareness of and engagement in global environmental protection for the health and well-being of future generations. Furthermore, it highlighted the value of international cooperation in global issues, such as environmental degradation. As with Stockholm, the 2002 World Summit on Sustainable Development in Johannesburg, South Africa, identified poverty as the main cause of environmental degradation and social problems. As such, measures to eradicate poverty were deemed essential to a sustainable future. These measures called for greater access to basic health services, clean water, and sanitation facilities, and education. It also called for greater participation by women and indigenous peoples in economic activities. Other proposed policies involved giving poor people access to basic rural infrastructure and credit facilities, and application of new environment-friendly technologies (UN 2002).

Eber (1992) as cited in Bramwell (1998) states that tourism can contribute to sustainable development when: “... It operates within natural capacities for the regeneration and future productivity of natural resources; recognizes the contribution that people and communities, customs and lifestyles make to the tourism experience; accepts that these people must have an equitable share in the economic

benefits of tourism; and is guided by the wishes of local people and communities in the host areas

The Purpose of Sustainable Development

The goal of Sustainable Development is clearly secure economic development, social equity, and environmental protection. As much as they could work in harmony, these goals sometimes work against each other. The rapid development of good living, travel, and the consumer society has often resulted in less protection to the environment and to some groups of the world population.

PRINCIPLES OF SUSTAINABLE FOOD

People and businesses adopting a sustainable approach to food should:

1. Use local, seasonally available ingredients as standard, to minimize energy used in food production, transport and storage.
2. Specify food from farming systems that minimize harm to the environment, such as certified organic produce.
3. Limit foods of animal origin (meat, dairy products and eggs) served, as livestock farming is one of the most significant contributors to climate change, and promote meals rich in fruit, vegetables, pulses, whole grains and nuts. Ensure that meat, dairy products and eggs are produced to high environmental and animal welfare standards.
4. Exclude fish species identified as most 'at risk' by the Marine Conservation Society, and choose fish only from sustainable sources - such as those accredited by the Marine Stewardship Council.
5. Choose Fairtrade-certified products for foods and drinks imported from poorer countries, to ensure a fair deal for disadvantaged producers.
6. Avoid bottled water and instead serve plain or filtered tap water in reusable jugs or bottles, to minimise transport and packaging waste.
7. Promote health and well-being by cooking with generous portions of vegetables, fruit and starchy staples like whole grains, cutting down on salt, fats and oils, and cutting out artificial additives.

CHALLENGES OF SUSTAINABLE FOOD

Food Security

The Food and Agricultural Organization (FAO) defines food security as a condition where - all people at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Four broad dimensions of food security are usually identified: availability—the supply of food in an area, access—the physical and economic ability of people to obtain food, utilization—the proper consumption of food and stability—the sustainability of food supplies. Food insecurity is the absence of food security implying that hunger exists as a result of problems with availability, access and utilization or that there is susceptibility to hunger in the future (FAO, 2002).

Food safety has always been a concern of food service operators. However, the number of food borne illness attributed to the food service industry is still significant. The food service industry is serving a public that is increasingly intolerant of any food safety risk. All food service operations have the potential to cause food borne illness through errors in purchasing, receiving, storing, preparing and serving food. Food service operator cannot assume workers learned proper personal and food hygiene practices in their homes or that government health inspection will safe operations. The National Restaurant Association has reaffirmed its position that the responsibility for providing safe and wholesome food rests with the food service industry. It has called the establishment of and adherence to effective standards of safe food handling practices.

Sanitation

Sanitation is the creation and maintenance of healthful, or hygienic, conditions. It comes from the Latin word sanitas meaning health. In a food service situation, the word sanitation means wholesome food, handled and prepared in a way that the food is not contaminated with disease –causing agents. In other words, sanitation is what helps food stay safe. But sanitary simply does not mean clean as which appears to be clean may not always be sanitary. Clean means free of visible soil. Sanitary means free of harmful levels of disease causing micro-organisms and other harmful contaminants. Clean refers to aesthetics and concerns outward appearance- a face without a smudge, a glass that sparkles, a shelf wiped clear of dust.

The following questions concerning food sustainability are central to this study: issues and potentialities of organic farming and food production and trends of implementation of management systems in the food sector. Where production sustainability is one of the most important factors influenced by development. There are two possibilities or directions for further sustainable food production development. First direction for further food chain development is food production in medium and large companies (industrialization and cost effective production) mainly for international and regional (EU, former USSR etc.) markets.

Issue of Food Waste

Food waste is a significant sustainability issue for the world. Food waste prevention and consumer engagement are measures which can help to improve the sustainability of food. For example, UK generates over 16 million tonnes of food waste every year, costing an estimated £22 billion a year. UK households throw away 8.3 million tonnes of food and drink waste, worth over £12 billion, every year. Most of this is avoidable; preventing it could save the average UK family £680 a year. The climate change benefits of tackling food waste would be equivalent to taking 1 in 4 cars off the UK's roads (WRAP, 2011).

The hotel industry can reduce the amount of waste produced by implementing and following a waste management system that is modeled around the concepts of reduce, reuse and recycle (Greenhotelier, 2004). Approximately 54 percent of a hotel's solid waste can either be recycled or reused

(Alexander 2002). A study by Bohdanowicz (2005) identified that "a large proportion (50-60 percent) of the waste materials in an accommodation facility can be recycled or reused."

Increasing the primary production of food is only one of the many strategies that will be required to feed nine billion people sustainably and equitably by 2050. The challenge is to achieve optimal results right across the food system. This requires that substantial inefficiencies across the entire food supply chain – from the farm gate to the point of consumption – are addressed. Some estimates suggest that as much as half of all food grown is lost or wasted before and after it reaches the consumer (Lundqvist, J., C. de Fraiture and D. Molden, 2008), although there are significant uncertainties and gaps in our understanding of losses in the food supply chain across the globe. In low-income countries, where infrastructure for storage and supply are often inadequate, food losses are greatest in early post-harvest stages, whereas in high-income countries, the greatest losses are usually incurred by the consumer (Lundqvist, J., C. de Fraiture and D. Molden, 2011)

Food waste prevention can therefore deliver significant environmental benefits, in terms of landfill avoidance, freshwater conservation and the mitigation of climate change. Raising awareness of food waste amongst consumers and providing practical advice to them can also help them to waste less and realise financial savings. Preventing food waste can also help to address other key strategic food issues, including supporting more healthy sustainable diets (through for example better control of portion sizes), food and water security.

Food Safety & Quality

Food safety and food quality are critical to bottom line. Food that has off flavors, is dry, or appears stale is not likely to impress customers. Preserving food quality is another objective of sanitation. Sanitary handling is a major factor in both food safety and quality. Food that is stored, prepared and served properly is more likely to retain its quality. The standards of a food's quality include its safety, appearance, chemical properties, texture, consistency, nutritional value and flavor. Any one of these can be destroyed by unsanitary procedures from purchase to service. Proper food handling with is important to preserve food quality.

BENEFITS FROM HYGIENIC PRACTICES

In addition prevention from bad publicity that can follow an outbreak of food-borne illness catering unsafe food. Immediate returns can be gained through good food-protection practices. Food costs are lowered when waste is reduced and when portion control is improved. Quality control is improved when procedures and practices are standardized. Providing high quality food is an important strategy in an increasingly competitive industry. Increased productivity is achieved when employees are trained on continual basis and accountable for their actions. Thus, improved food protection results in improved operating efficiency, which ultimately results in improved profitability. Sanitary procedures will prevent outbreaks of

food borne illness, maintain goodwill, and keep the financial bottom line from bottoming out.

EMERGING LAWS & PRACTICES

Food Safety & Standards Act 2006 of India

The Much awaited Food Safety & Standards Act 2006, Rules 2011 and Regulations 2011 is implemented from 5th August 2011, all over the country by repealing the Prevention of Food Adulteration Act 1954 and other Food Laws / orders, in this regard the central govt. The Food Authority has notified the Rules and regulation on 5th May 2011 and 1st August 2011 respectively. The Central Govt. earlier indicated in the Supreme Court in response to a PIL that the Act would be implemented from 1st Jan 2010 but the machinery was not ready then. The FSS Act- 2006 was enacted in the year 2006 by consolidating different food laws and to establish a single statutory regulator for the food sector namely "**The Food Safety and Standards Authority of India**". The main function of the Authority is for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure the availability of safe and wholesome food for human consumption and for matters connected herewith or incidental thereto. The main features of the Act are: (a) Movement from multi-level and multi-departmental control to integrated line of command; b) Integrated response to strategic issues like novel/genetically modified foods, international trade; (c) Licensing for manufacture of food products, which is presently granted by the Central Agencies under various Acts and Orders, would stand decentralized to the Commissioner of Food Safety and his officer; (d) Single reference point for all matters relating to Food Safety and Standards, regulations and enforcement; (e) Shift from mere regulatory regime to self-compliance through Food Safety Management Systems; (f) Responsibility on food business operators to ensure that food processed, manufactured, imported or distributed is in compliance with the domestic food laws; and (g) Provision for graded penalties depending on the gravity of offence and accordingly, civil penalties for minor offences and punishment for serious violations.

The Prevention of Food Adulteration Act 1954 that came into force on June 1, 1955 was aimed at preventing adulteration of food sold in hotels and packaged and raw food. The drawbacks PFA Act was that many of the cases filed so far have not reached a logical conclusion either because the witnesses were not traceable or other reasons like the enforcing machineries especially the health departments, municipalities/corporations, railways, Ports are overburdened with their own work. At least 10% of the cases pending were filed 20 years ago, and more than 40% were filed a decade ago. The PFA also did not address the core issue of Food safety, through Consumer education and was confined to only checking of adulteration in food items. Under PFA petty offences also required a minimum of 6 months imprisonment together with a fine of Rs. 1000/- due to which a large number of unwanted cases mounted in courts. The PFA Act and other orders related with food do

not have enough provisions to deal with recent developments in Food Science and Technology which has developed considerably in recent years and a whole new range of processed foods including functional food, nutraceuticals, proprietary foods, dietary supplements, genetically modified or engineered foods are hitting the market at a fast pace and remains unregulated.

Whereas the new Food Safety & Standards Act focuses on checking food quality and hygiene at outlets, there is scope for the food recall from the market by the manufacturer / wholesaler if the food is found to be substandard. Fines shall be imposed from 1 lakh to 10 lakh and will be dealt separately by the Adjudicating Officer (ADM) and cases which may require imprisonment will only go to court or to Food Safety appellate tribunal. This will speed up prosecution and will prove as deterrent for the defaulters.

In the new act the petty food operators (shopkeepers/manufacturer) with less than 12 lakh annual rotation will not require a food license and they will need a simple registration on payment of Rs.100/-fees. The State Food Licenses will be issued by the designated officer of each district appointed by the State Food Safety Commissioner on payment of the prescribed fees by the Govt. of India. All over India valid Food license will be issued by the Central Licensing Authority" appointed by the Chief Executive Officer of the Food Safety and Standards Authority of India in his capacity of Food Safety Commissioner. In the State and UTs the Act will be enforced through the Commissioner Food Safety, Designated Officers, Food Safety Officers, Food Analyst which will together constitute the State Food Authority.

Codex India

The Codex Alimentarius Commission (CAC) was created in 1961/62 by Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), to develop food standards, guidelines and related texts such as codes of practice under the Joint FAO/WHO Food Standards Programme. The main purpose of this Programme is to protect the health of consumers, ensure fair practices in the food trade, and promote coordination of all food standards work undertaken by international governmental and non-governmental organizations.

Codex India" the National Codex Contact Point (NCCP) for India, is located at Food Safety and Standards Authority of India (Ministry of Health and Family Welfare), FDA Bhawan, Kotla Road, New Delhi -110002, India. It coordinates and promotes Codex activities in India in association with the National Codex Committee and facilitates India's input to the work of Codex through an established consultation process.

Codex Alimentarius

The Codex Alimentarius is the basic international standard of Food Safety and Hygiene that has been adopted by India and is being followed by all sector of the food production industry. This also affects hotels and restaurants being at tertiary level in the food chain. The codex principles uses the HACCP approach to identify various points of potential hazard to food safety, establishes critical limits and control

points and systems of taking corrective actions and monitoring the effectiveness of these corrective actions in ensuring food safety. Hazard Analysis and Critical Control Point (HACCP) is a system of risk management developed to control food safety. It can be described as an operation-specific, internally managed system of preventative control that identifies, evaluates, and controls hazards of significance to food safety. While it has a relatively long history, originating as a means of assuring the safety of meals produced for the U.S. manned space program in the 1960s, it is only in the last 10 years that it has emerged as the primary approach to securing the safety of the food supply (D.A. Corlett, Jr. 1998). This is reflected in recommendation of HACCP by organizations such as the U.S. National Academy of Sciences, the International Commission on Microbiological Specifications for Foods and a Codex Alimentarius Commission decision to recommend its use by both the food industry and regulatory authorities. This latter development has had a direct effect on the countries of the European Union who have since built a requirement for risk management, based on HACCP principles, into the operational activities of all food businesses

The Codex Alimentarius Commission And The Fao/Who Food Standards Programme

The Codex Alimentarius Commission implements the Joint FAO/WHO Food Standards Programme, the purpose of which is to protect the health of consumers and to ensure fair practices in the food trade. The Codex Alimentarius (Latin, meaning Food Law or Code) is a collection of internationally adopted food standards presented in a uniform manner. It also includes provisions of an advisory nature in the form of codes of practice, guidelines and other recommended measures to assist in achieving the purposes of the Codex Alimentarius. The Commission has expressed the view that codes of practice might provide useful checklists of requirements for national food control or enforcement authorities. The publication of the Codex Alimentarius is intended to guide and promote the elaboration and establishment of definitions and requirements for foods, to assist in their harmonization and, in doing so, to facilitate international trade.

Basic Texts on Food Hygiene

In June 1997 the Codex Alimentarius Commission adopted three newly revised basic texts on food hygiene. These texts are published officially in Volume 1B of the Codex Alimentarius and have been republished in this compact format to allow their wide use and understanding by governments, regulatory authorities, food industries and all food handlers, and consumers.

ISO 22000:2005

ISO 22000 (Food Safety Management System) is an international standard, aligned with ISO 9001:2000 as well as HACCP, and is applicable to the entire food chain irrespective of the size and complexity, such as complete supply chain (production – processing - distribution); agricultural producers (animal based-plant based food); other

suppliers of services and goods (packaging and veterinary products); processors and retailers

Features of ISO 22000:2005

- a Integrates the principles of Hazards Analysis and Critical Control Point (HACCP) system developed by Codex Alimentarius Commission. It combines the HACCP plan with prerequisite programme (PRPs) and operational PRPs.
- b Requires that all Hazards that may be reasonably expected to occur in the food chain are identified, assessed and controlled.
- c Can be applied independent of other management system standards or can be integrated with existing other management systems.
- d Intended for organizations seeking more focused, coherent and integrated food safety management systems.
- e Emphasis on preventions of food safety hazards of all types.
- f Ensures compliance with legislative and regulatory requirements.
- g Allows even small, tiny scale organizations to implement as externally developed combination of control measures.
- h Provides for management of potential emergency situations & accidents that can impact food safety

CONCLUSION

Sustainable Development is a holistic concept based on a simple principle—"development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable food is holistic food which is also a safe, quality and tasty food creating peaceful and healthy society. It has got focus on hygiene and waste prevention. As per Indian Vedas; sustainable practices were part of day to day life and traditions of ancient India and food were prepared with aim to generate healthy mind & soul. The challenges of present decade led to concept of sustainability by Brundtland commission in 1987. Food sector is facing challenge of hygiene & sanitation, food safety and quality, food wastage, food security. The solution to these lies in application of emerging laws & practices like- HACCP-Codex, ISO22000, India's FSSA-2006 for ensuring sustainable food.

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