CHAPTER 3
AN OVERVIEW OF ECO FRIENDLY PRODUCTS
INDUSTRY IN INDIA

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CHAPTER 3

AN OVERVIEW OF ECO FRIENDLY PRODUCTS INDUSTRY IN INDIA

3.1 Introduction

In an attempt to get an insight into the industrial scenario of Eco friendly products in India, researcher found it difficult to get the structured and concrete information about the industry.

As the name “Eco friendly” itself reveals so many meanings to so many persons, it is difficult to find a precise definition of the term, ‘Eco Friendly’. In India government authorities had made an attempt to define Eco friendly product by calling it as eco products that cause minimal harm to people and the environment. The production and/or consumption of these products have a minimal impact on the environment. Although there are no universal certifications or standards to deem a product as eco-friendly, but there is a number of Eco labeling organisations that have certifications.

In India, Centre for Pollution Control Board, Ministry of Environment and Forest has launched the eco-labeling scheme known as ‘Ecomark’ in 1991 for easy identification of environment-friendly products to increase the consumer awareness.

Table 3.1
The Product categories covered under Indian Ecomark Scheme:

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<th>Sr.</th>
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<tbody>
<tr>
<td>1</td>
<td>Soaps &amp; Detergents</td>
<td>5</td>
<td>Packaging Materials</td>
<td>9</td>
<td>Food Additives</td>
<td>13</td>
<td>Plastic Products</td>
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<tr>
<td>2</td>
<td>Paper</td>
<td>6</td>
<td>Architectural Paints and</td>
<td>10</td>
<td>Wood Substitutes</td>
<td>14</td>
<td>Textiles</td>
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<td></td>
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<td></td>
<td>Powder Coatings</td>
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<tr>
<td>3</td>
<td>Food items</td>
<td>7</td>
<td>Batteries</td>
<td>11</td>
<td>Cosmetics</td>
<td>15</td>
<td>Fire-extinguisher</td>
</tr>
<tr>
<td>4</td>
<td>Lubricating Oils</td>
<td>8</td>
<td>Electrical/Electronic Goods</td>
<td>12</td>
<td>Aerosol Propellants</td>
<td>16</td>
<td>Leather</td>
</tr>
</tbody>
</table>

(Source: Compiled by the Researcher [http://cercenvis.nic.in/])
3.2 Criteria for Eco Mark

The criteria for marking product as Eco Mark product are based on the cradle-to-grave approach, i.e. from raw material extraction to manufacturing and to disposal. The basic criteria cover broad environmental levels and aspects, but are specific at the product level. A product is examined in terms of the following main environmental impacts:

1. That they have substantially less potential for pollution than other comparable products in production, usage and disposal.
2. That they are recycled, recyclable, made from recycled products or bio-degradable, where comparable products are not;
3. That they make significant contribution to saving non-renewable resources including non-renewable energy sources and natural resources compared with comparable products;
4. That the product must contribute to a reduction of the adverse primary criteria which has the highest environmental impact associated with the use of the product, and which will be specifically set for each of the product categories.\textsuperscript{ii}

3.2.1 Product General Requirements:

The product general requirements deal with the issues of compliance of the pollution control acts; raising environmental awareness among consumers etc., in addition to safety, quality and performance of the products.

3.2.2 Product Specific Requirements:

While determining the product specific requirements, the following issues have been taken into account:

1. Production process including source of raw materials;
2. Use of natural resources;
3. Likely impact of the environment;
4. Energy conservation in the production of the product;
5. Disposal of the product and its container;
6. Utilisation of “Waste” and recycled materials;
7. Suitability for recycling or packaging; and
8. Biodegradability
9. Effect and extent of waste arising from the production process;

Eco Label is being given to those products and manufacturers who fulfill the above mentioned product specific criteria. An Ecolabel is basically a label, which distinguishes a product (i.e. good or service) on its environmental preference within a product category based on life cycle consideration. An impartial third party awards an ecolabel to a product in contrast to self-created environmental symbol or claim statement specified by manufacturer or service provider to meet eco criteria.

Ecolabelling is only a kind of environmental labelling that informs the consumers about the relative environmental quality of the product. There are many different eco labels being used around the world. Ecolabelling is now a very useful tool to encourage environmental practices for governments and to identify and establish markets i.e. domestic and international for industries to promote their environmentally preferable products. Many countries have adopted some kind of eco mark, while others are considering program development.

A product with ecolabel (good or service) complies with environment without harming the nature. So Eco products are environment friendly, non-toxic, and sustainable products.

The Ministry of Environment & Forest (MoEF), Government of India, has launched the ecolabelling scheme known as “Ecomark” in to the market in 1991. India has made an ecolabelling scheme as a part of its environmental policy. The MoEF administers the programme with technical advice from the Central Pollution Control Board (CPCB).
Following is the brief description of Eco Labels available in India

### Table 3.2
Eco Labels available in India

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Eco Label</th>
<th>Symbol</th>
<th>Sr.</th>
<th>Eco Label</th>
<th>Symbol</th>
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<tr>
<td>7.</td>
<td>UPS Carbon Neutral</td>
<td>![UPS Carbon Neutral Symbol]</td>
<td>8.</td>
<td>The Green Signal</td>
<td>![The Green Signal Symbol]</td>
</tr>
</tbody>
</table>

Source: (Compiled by the researcher)

### 3.3.1 Eco Labels and their specifications:
The Meaning and Information of each Label is presented below:
1. **Energy Efficiency Labeling**

Energy labels are not proper eco labels because they focus on a single aspect and their use is often mandatory on certain products. STAR is a well-known environmental label focused on energy efficiency. It identifies and promotes energy-efficient products that have the same quality standards of equivalent models, and in addition reduce energy-related CO2 emissions and lead to cost savings.

The Bureau of Energy Efficiency, Ministry of Power has developed a scheme for energy efficiency labeling. The scheme was launched by the Hon'ble Minister of Power in May 2006 and is currently invoked for equipment/appliances (Frost Free (No-Frost) refrigerator, Tubular Fluorescent Lamps, Room Air Conditioners, Direct Cool Refrigerator, Distribution Transformer, Induction Motors, Pump Sets, Ceiling Fans, LPG, Electric Geysers, and Colour TV).

Under this program, for the benefit of general public, the appliance manufacturers could voluntarily affix BEE Star Label on their appliances showing the level of energy consumption by the appliance both in terms of absolute values as well as equivalent number of stars varying from one to five, in accordance with specific stipulation. The greater the number of stars on the label, higher the appliance energy efficiency and lower its electricity consumption However, from January 2010, affixing BEE star label has been made mandatory for Frost Free Refrigerators, whereas, BEE Labeling is still in the voluntary phase for Direct Cool Home Refrigerator.

2. **Certification body for Sustainable Development**

An inspection and certification body for organic, fair trade, and good agricultural practices (GAP), named Ecocert, operates in eighty countries of the world. It provides inspection and certification services for safety of environment and mankind. In India, Ecocert operates from Aurangabad, Maharashtra. It covers south Asian countries. It has started its operations in India in 2002.

Ecocert India has certified over three hundred thousand hectares of land for 170 of its clients constituting Processors, Exporters, Farmers' Groups and Individual Farmers.
The main objective of Ecocert is to promote the India Organic logo in the international markets and the Agmark India Organic logo in the Indian markets and give recognition to organic produce from India. Regular audits by its Head Office and Accreditation agencies help Ecocert sustain the faith of the clients and consumers.

3. Forest Stewardship Council (FSC) Chain of Custody Certification

FSC is a global, not-for-profit organisation devoted to the promotion of responsible forest management worldwide. It enables businesses and consumers to make informed choices about the forest products they buy, and create positive change by engaging the power of market dynamics. FSC certification is a voluntary, market-based system that allows companies to promote their products as deriving from well-managed forests.

In India FSC is based in New Delhi. FSC facilitates the development of standards, ensures monitoring of certified operations and protects the FSC trademark so consumers can choose products that come from well-managed forests.

4. Good Weave International

Good Weave International (GWI) is a non-governmental organisation working to end child labor in the handmade rug industry and offer educational opportunities to children in South Asia. The Good Weave certification program was formerly known as “RugMark”. The Good Weave label is issued to rug manufacturers that adhere to the Generic Good Weave Standard, agree to its independent verification and voluntarily join as licensees. Good Weave’s standard is currently being broadened to include additional labor and environmental criteria that aim to raise the standard of living in weaving communities and address the root causes of child labor.

In India, Good Weave International is based in New Delhi and Varanasi (Uttar Pradesh). The organisation, not only concerned with eradicating child labour in the rug industry, but also working towards ensuring adult rug workers are treated fairly and that rugs made are not at the expense of their health, safety, or environment.
5. **Green Globe Certification**

Green Globe is the global travel and tourism industries’ certification program for sustainable tourism. Green Globe Members save energy and water resources, reduce operational costs, positively contribute to local communities and their environment and meet the high expectations of green leisure and business travelers.

In India, there are accredited auditors who are professional environmental or sustainability consultants who have undergone Green Globe Certification training and are registered on an annual basis. Their role is to provide Green Globe clients with third party verification that certification criteria have been met. In India, there are tourist places like Svaastha Spa, Hotel United 21, Club Mahindra Lakeview Munnar, and Club Mahindra Fort Kumbhalgarh have “Green Globe” label.

6. **Organic Certification**

The Agricultural and Processed Food Products Export Development Authority (APEDA) is an export promotion organisation under Ministry of Commerce & Industries, Government of India. It is mandated with the responsibility of promotion and development of the export of its scheduled products.

Indian National Standards for Organic Production & India Organic Logo is governed by APEDA, which provides national standards for organic products through a National Accreditation Policy and Programme. The aims of the National Programme for Organic Production (NPOP) is to provide the means of evaluation of certification programmes for organic agriculture & products as per internationally approved criteria and to accredit certification programmes. It also facilitates certification of organic products in conformity to the National Standards for Organic Products and encourages the development of organic farming and organic processing.

7. **UPS Carbon Neutral**

The UPS Carbon Neutral shipping label indicates that UPS customers have offset the climate impact of the Green House Gases (GHG) emissions produced by the transportation of that shipment. UPS calculates the emissions and purchases carbon offset credits equivalent to the GHG emissions created in shipping the package to...
An overview of eco friendly products industry in India

make it "carbon neutral". UPS has added India to its carbon neutral shipping programme. Under this programme, millions of customers now have the option to pay a small fee to calculate and offset the carbon emissions associated with their shipments. To use this service, users only need to check a box during the shipping process. UPS will calculate the carbon impact and purchase high quality certified carbon offsets on the customer’s behalf. UPS targets offsets certified to the “Gold Standard,” “Voluntary Carbon Standard” or “Climate Action Reserve.”

8. The Green Signal

Eco-label - The Green Signal - certifies environmental preferences adopted during the manufacturing of a product or a service. It is developed and certified by Ahmadabad based Indian Institute of Management. The Green Signal functions under the aegis of the Centre for Innovation, Incubation and Entrepreneurship (CIIE) at the Indian Institute of Management Ahmadabad (IIMA). The broader parameters for assessing a product or service are energy consumption, carbon footprints, water consumption, and waste generation and management, and Corporate Social Responsibility (CSR) commitments of the entity.

9. ISO 14000

The International Organisation for Standardization (ISO) develops international standards for all industrial sectors. The ISO 14000 family addresses various aspects of environmental management. It provides practical tools for companies and organisations looking to identify and control their environmental impact and constantly improve their environmental performance. It is awarded to organisations that identify and control the environmental impacts, comply with environmental laws/regulations and fulfill other requirements and continually improve upon them.

10. Ecotel Certification

The Ecotel certification is awarded to environmentally sensitive hotels. This certification recognizes outstanding achievement along the triple bottom line: environmental, social, and fiscal parameters. It is based on five areas of environmental management – environmental commitment, solid waste management,
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energy efficiency, water conservation and employee environmental education and community involvement - each of the management area is designated by a globe award. To be certified the hotels must achieve at least two globe awards. The certification is valid for two years and hotels and restaurants seeking an upgrade or recertification must apply at the end of two years.

Its India office based in Delhi conducts assignments within India and the Indian subcontinent for leading hotel companies, banks, and hotel development and investment groups.

11. Fair Trade

Fair-trade represents a new way to do business that looks holistically at the supply chain to address market failures and their social impact at source. It is not about aid or charity, but about recognizing the global community as having rights and responsibilities that extend across all of its stakeholders. Fair-trade standards are designed to support the sustainable development of small producer organisations and agricultural workers in the poorest countries in the world.

Its India office is based in Delhi and its mission is to be an organ of representation, coordination, exchange, and collaboration for the empowerment of small-scale farmers' and farm workers' organisations from Asia within the framework of Fair-trade Certification.

12. Better Cotton Initiative

A voluntary organisation, the Better Cotton Initiative (BCI) helps millions of farmer to grow cotton in a way that is good for the environment and the farmers and is more economical across the globe. It encourages farmers to adopt the better management practices in cultivation of cotton to achieve measurable reductions in main environmental impacts, while improving social and economic benefits for all cotton farmers across the world. The big challenges to making cotton more sustainable are excessive use of pesticides (bad for human health and the environment), environmentally inefficient production methods (which create water shortages and degrade the soil) and poor working conditions. Adidas, Gap Inc., H&M, ICCO, IFAP,
IFC, IKEA, Organic Exchange, Oxfam, PAN UK, and WWF founded the Better Cotton Initiative in 2005 to take steps towards the sustainable and better management practices for the cultivation of cotton. Better Cotton was first harvested from farmers in Brazil, India, Mali, and Pakistan in 2010-11. It is available 2012 onwards from China. Turkey is also aiming to produce Better Cotton as well. BCI for other regions is regularly in touch with organisations and governments to bring the Better Cotton programme.

13. Global Organic Textile Standards (GOTS)

The Global Organic Textile Standard (GOTS) is the leading textile processing standard for organic fibers worldwide, including ecological and social criteria, backed by independent certification of the entire textile supply chain. The aim to develop the Standards was to combine the various existing and draft standards in the area of eco textile processing. It defines the requirements to ensure the organic status of textiles— from harvesting of the raw material through responsible manufacturing of the product environmentally and socially to the labeling of the product. So it can provide a credible assurance to the end consumer. It covers the production, processing, manufacturing, packaging, labeling, exportation, importation and distribution of all natural fibres. Processors and manufacturers shall be enabled to supply their organic fabrics and garments with one certification accepted in all major selling markets. Version 3.0 was published on 1 March 2011, six years after the introduction of the initial version. High ecological and social requirements as well as global practicability and verifiability were taken into consideration in the revision work in order to achieve reliable and transparent criteria. The International Working Group is comprised of four reputed member organisations—the OTA (USA), IVN (Germany), Soil Association (UK) and JOCA (Japan), which contribute their respective expertise in organic farming and environmentally and socially responsible textile processing to GOTS together with other international stakeholder organisations and experts.

3.4 Eco friendly products Industry in India

With the guidelines prescribed for each Eco label, researcher tried to classify the Eco friendly products available in India in the following manner:
An overview of eco friendly products industry in India

Table 3.3
Classification of Eco friendly products Available in India

<table>
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<th>Sr</th>
<th>Category</th>
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<tbody>
<tr>
<td>1</td>
<td>Government of India Eco labeled Eco friendly products /Companies</td>
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<tr>
<td>2</td>
<td>Self Claimed /Not Certified by any of the Government of India Eco labeling organisation Products/Companies</td>
</tr>
<tr>
<td>3</td>
<td>Self Claimed/Unbranded, Locally manufactured, Small scaled Eco friendly products/Industries</td>
</tr>
</tbody>
</table>

(Source: Compiled by the researcher)

3.4.1. Government of India Eco labeled Eco friendly products /Companies

This category can be characterized by; those Eco friendly products and companies who have received Government of India’s Eco label for its eco friendly characteristics. In a view to easy identification of environment-friendly products and to increase the consumer awareness, in India, Centre for Pollution Control Board, Ministry of Environment & Forest has launched the eco-labelling scheme known as ‘Ecomark’ in 1991. Information about ecolabeling scheme is available on http://cercenvis.nic.in/.


Under the Eco Mark scheme, each product has to meet the criteria prescribed in The Gazette of India with amendments from time to time. Manufacturers across India, who followed the guidelines and received Eco mark, are discussed in this section.

I) Organisations/Products received Energy Efficiency Labelling

This section describes the organisations that received Energy Efficiency labeling.

1.1 LG Electronics India Pvt. Ltd. -Air Conditioner

LG design its products to achieve maximum energy efficiency while maintaining high aesthetic Standards. LG is now positioned to become the “No.1 HVAC and Energy Solution Company.” To ensure the success of this vision, LG will continue its steadfast efforts to design comfortable Environments for its end users and business partners using state-of-the-art green technologies.
1.2 Carrier Air Conditioning and Refrigeration Limited (Gurgaon, Haryana)

Carrier India was among the first few companies to be awarded energy labels for their products in March 2007. Carrier India offers the most energy efficient hi-wall split air-conditioner as per the BEE (Bureau of Energy Efficiency) website (as of 5 October, 2010). Company has been constantly striving to enhance the existing ratings from 1 to 2 to 3 in the WRAC category where 3 is the highest level and similarly increasing the ratings to 3, 4 and 5 in the hi-wall segment. In 2009, more than 95% of residential products produced in Carrier India's manufacturing facility were labeled as per the BEE scheme. In 2008, this number was over 80%.

1.3. Samsung India Electronics Pvt. Limited (Air Conditioner)

India’s Star performers - Samsung Air Conditioners are engineered to consume minimum energy In fact, the BEE Star Rated Samsung Air Conditioner range is one of the most energy efficient range in India. Samsung Air Conditioner consumes less energy which contributes to saving the Earth’s resources and the environment.

1.4 LG Electronics India Pvt. Limited (Refrigerator)

LG Electronics India Pvt. Ltd., a wholly owned subsidiary of LG Electronics, South Korea was established in January, 1997. LG set up a state-of-the art manufacturing facility at Greater Noida, near Delhi, in 1998, with an investment of Rs 500 Crores. This facility manufactured Color Televisions, Washing Machines, Air-Conditioners and Microwave Ovens. During the year 2001, LG also commenced the home production for its eco-friendly Refrigerators and established its assembly line for its PC Monitors at its Greater Noida manufacturing unit.

1.5 Videocon Industries Limited (Refrigerator)

IOL Chemicals and Pharmaceuticals Limited is a major Indian manufacturer of Organic Chemicals, Pharmaceuticals Bulk Drugs and intermediates founded in 1986. IOLCP has grown from a single product company to a major global player with a diversified multi product.

1.6 Godrej & Boyce Manufacturing Company Limited (Refrigerator)

Most of us have seen Godrej Refrigerators from our childhood. In fact the brand is so strongly associated with the category that if we talk about refrigerators, the first name
that comes to our mind is Godrej. Godrej & Boyce Mfg. Co. Ltd. was the first company in India to start manufacturing refrigerators way back in 1958 and has been a pioneer and a leader in the Appliance space ever since. Godrej and Boyce was the 1st and only Company in India to make its Entire Refrigerator Range Green (100% CFC, HCFC & HFC free) in 2002.

1.7 Crompton Greaves Limited---Tubular Fluorescent Lamp
The Lighting business comprises two segments - Light Sources with a wide range of GLS, FTL and CFL and many high end light source products and Luminaries - a large variety of both internal as well as external Luminaires for commercial and home applications; and is now poised as a solutions provider offering total lighting solutions for large projects as well as lighting advisory services for industries. CG has collaborated with Lemnis Lighting of the Netherlands to manufacture LED-based lights. CG's proudest achievement to be the first in India to indigenously provide a highly energy efficient light emitting diode (LED) lamp of 5 watts having an average life of 50,000 burning hours, and the complete elimination of mercury.

1.8 Surya Roshni Limited - Tubular Fluorescent Lamp
Surya Roshni Ltd has been one of India's leading Lighting manufacturers since close to 3 decades. The company manufactures a wide range of Light Sources with a turnover in excess of USD 400 Million. Luminaires have been designed keeping in mind optimum use of energy as well as to ensure that the aesthetics, efficiency & environment needs are not compromised. Besides luminaires, SURYA manufactures a range of H I D lamps that include High Pressure Mercury Vapour, High Pressure Sodium vapour& Metal Halide lamps.

II) Organisations/Products that received Eco cert certification

2.1 Govind Milk Lives up to Tagline ‘Good morning to Good Health’! Goes All Organic!
Govind Milk and Milk Products Pvt. Ltd. have decided to convert to 100 percent organic management of its milk production in phased manner.

PRLog (Press Release) - Dec. 23, 2011 - Govind Milk, one of the foremost endeavours in the field of certified organic milk and milk products in the country
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today, was established in the year 1995 with an intention to help the underprivileged farmers in the region. It is situated in Phaltan, district Satara, Maharashtra. Govind Milk, today a renowned and quality conscious brand for milk and milk products in the state of Maharashtra and adjoining states, has embraced organic milk production, something which is good for consumers, farmers and more importantly for cows!

“We are very glad to announce a new concept of organic milk in the market. Govind milk has launched today the in-conversion to organic milk in the market. The small farms associated with us produce the feed with as per organic regulations, cows dwelling loose housing barns in healthy environment & are looked after well. These organic farms are also ECOCERT certified as In-conversion to organic first year”, says Mr. Dhumal, managing director of Govind milk and milk products Pvt. Ltd. and an avid follower of a holistic meditation technique of Vipassana.

It was Mr. Dhumal who after having witnessed the results on body, mind and soul after attending Vipassana course on him and others in the organisation, realized that stress free life is a birthright of animals too, who happens to be the basis of any dairy business!

“The deeper I thought; stronger I believed that animals shouldn’t be tied at all and should be fed their real food which is also without toxins,” said Mr. Dhumal, “Loose housing barns are proving to be a low operational cost concept. It facilitates free movement of cattle/livestock in a designated area delivering comfort & access to water & feed. To protect the animals from heat during day time some natural or artificial shade is provided. The natural instinct of an animal to rub his body against some available hard surface at intervals is taken care of with a brush mounted strategically in the loose houses.”

“Thanks to these measures and feeding fodder strictly grown on the certified organic farms of the individual farmers, animals are healthy and happy thereby yielding milk which is most favourable to consumers’ bodies,” said Dr. S P Gaikwad, a veterinarian by profession and the strong proponent of organic milk from past few years. “The process to register our contracted small farms with Ecocert started two years back when we first attended the one day national convention they had organised in Ahmedabad on organic milk and milk products. I understood that organic milk is need
of the hour and nothing else we can produce which is equally beneficial to all consumers, farmers, animals and nature.”

Govind Milk which has got today the procurement capacity of 3,25,000 litres of milk and of which around 2,00,000 litres of milk is sold in retail form through an established distribution channel, is owned by Sanjeevraje Naik Nimbalkar who is the grandson of the Late Malojiraje Naik Nimbalkar, the former ruler of the State of Phaltan. Mr. Sanjeevraje and his wife, Shivanjaliraje both of them also the keen followers of Vipassana are committed to making the lives of everyone involved with this business happier. The husband and wife duo have experienced that those who embrace this path of enlightenment, give up all vices, leading to a friendly, efficient & trustworthy environment in the society and organisation. Decision of professionally producing certified organic milk was hence just an inevitable and obvious step ahead and manifestation of their inner conviction.

“Milk is one of the most important components of our diet and its consumption ensures good health, growth and development. Compared to conventional, organic milk contains more CLA, OMEGA 3, anti-oxidants and vitamins. Regular intake increases immunity and helps to fight against heart ailments, arthritis, cancer etc. Thus the demand for organic milk is growing amongst health conscious consumers. It has been that there is a huge demand for this milk in our own country as well and consumers are willing to pay a premium price for organic milk and milk products.” Says Mr. Sanjeevraje Nimbalkar.

“The Ecocert certification is helping us enough in market penetration today. It is still at a very initial stage since this is first year of certification and we have acquired the in-conversion status from Ecocert. But the progress of sell is satisfactory even in in-conversion status. Today we are selling 1000 litre milk as in-conversion to organic. There is a permanent stall in Kavita Mukhi’s Farmers’ market at Bandra, Mumbai. Besides, organic milk is also being sold through Govind’s own Shoppe at Sanpada,” says Mr. Dhumal. “Again there is a new scheme of door delivery which we are promoting aggressively. At present it is operational only in Mumbai. Whoever registers their name and address with us will receive the organic milk at their doorstep! It is ensured that our own delivery boy delivers the milk and there is no sale
through un-authorised counters and persons. In a very short span the number of families registered for home delivery service has risen to 120!”

“Organic is a very serious business segment for us. We aim to convert a major portion of our milk and milk products’ production into organic and also wish to diversify the existing product range in organic. Ultimately, we all strive for stress free life which is in harmony with Mother Nature. Consumption of organic milk enables us to achieve this objective at our level to some extent but to much extent for the cows and soil,” says Mr. Dhumal!°

III) Organisations/Products that received Green Globe certification

At a time when sustainable tourism and concern for the climate is the global buzzword, Jaypur city's oldest heritage hotel, Rambagh Palace, has won the prestigious Green Globe Certified Silver status under the Green Globe Earthcheck Certification Programme.

Among the significant eco-friendly initiatives at the hotel is 100% rain water harvesting through 16 water harvesting wells which have been made to cover the rainfall in entire 47 acre area. Besides, the hotel also uses plumbing fittings which help reduce water consumption to a large extent and certifies it at a zero discharge hotel.

Benchmarked for energy, water management, Ecosystem conservation and Corporate Social Responsibility, the award recognizes the hotels commitment to operating at the world's highest environmental standard.

Spread over 47 acre, the award credits the hotel's commitment towards conserving the major environmental problems facing the planet, including climate change, waste reduction and non renewable resource management. The awards further hold significance as the Green Globe International is an affiliate member of the United Nations World Tourism Organisation (UNWTO) with the World Travel & Tourism Council WTTC, being a shareholder in the company. vii
3.2 Hyderabad International Convention Centre is now Green Globe Certified
6th April 2010, Hyderabad India

Hyderabad International Convention Centre (HICC) has achieved the prestigious Green Globe Certified status under the Green Globe Earth check Certification programme managed by EC3 Global. The global programme recognizes HICC’s commitment to operating at the world’s highest environmental standard. HICC is the first Green Globe certified convention centre in India. Prior to achieving Certification, HICC successfully Benchmarked using the Earth check tool against key environmental indicators including energy and water consumption, total waste production and community commitment. According to Philip Logan, General Manager, Hyderabad International Convention Centre, “It is an honour to receive the Green Globe certification for Hyderabad International Convention Centre. We have committed ourselves to the cause of environment welfare and several initiatives undertaken form a part of consistently delivering towards responsible tourism”.

HICC chose to demonstrate their commitment to the environment by undertaking Certification – the highest level of the Green Globe programme as managed by EC3 Global. The Certification process involves either an onsite audit or offsite assessment by an EC3 Global approved independent third party Green Globe Auditor. The successful completion of the Certification process demonstrates HICC’s strong commitment to the principles of environmental sustainability.

3.3 First five-star hotel in India earns Green Globe certification December 13, 2013

LOS ANGELES, California - Achieving another milestone in the hospitality industry, Movenpick Hotel & Spa Bangalore in India, has recently been awarded Green Globe certification. This makes it the first five-star hotel in the country to be Green Globe certified. In line with the corporate philosophy, Movenpick Hotel & Spa Bangalore has been dedicated to the preservation of a safe and healthy environment for years.

“In the tough times of today, being eco-friendly and maintaining it, is the core of all business, said Biswajit Chakraborty, General Manager at Movenpick Hotel&Spa Bangalore. “We have implemented eco-friendly practices at all levels of our
operation, from people to procurement, to product and services. The core values at our property include a firm commitment to conserving resources, preventing pollution, and to act with integrity. Sustainability to us means meeting the needs of the present without compromising the ability of future generations to meet their own needs. We are proud of our achievements, and will challenge ourselves to improve the standards, since sustainability is an ongoing process.”

The values of quality, reliability, and care are fundamental in guiding this upscale property towards best sustainable business practices. A special Green Team formed of eleven individuals from different departments, monitors the progress of eco-friendly measures, shaping and realizing the environmental goals of the hotel. The hotel uses green energy, provided by wind, and LED lighting is installed throughout all areas of the property. Waste volume, weight and reduction goals are specified, garbage is being segregated per the waste management policy of Movenpick. A reuse and recycle policy is in place and packaging is reduced to a minimum. Suppliers adhering to environmentally friendly practices, organic and certified products are favored.

As part of their CSR initiatives, Movenpick Hotel &Spa Bangalore works closely with a number of social and fund raising organisations, contributing to a positive community and environment. “Joy of Giving” is a campaign conducted every three months, and employees donate their clothes, books, and toys that are still in good condition, to fund local charities, such as the regional Snehasadan. In collaboration with the Ministry of Tourism, the hotel strongly supports Hunar Se Rozgar, a training program creating employable skills in eligible young people. Blood donation drives, relief funds, and charitable events are organized by on a regular basis.

IV) Organisations that received The Green Signal certification

4.1GreenNGood.com

GreenNGood.com recently became India’s first online retail store to receive a Green Signal ecolabel, issued by the Indian Institute of Management Ahmedabad (IIMA) and their Centre for Innovation, Incubation, and Entrepreneurship (CIIE). Founded in 2009, the online retailer sells ecofriendly consumer goods that range from clothing, to beauty products, to home décor. Its recent Green Signal certification points to the great efforts taken by the founders to minimize their company’s environmental
impact, from the individual products right down to the reusable packaging. The Green Signal ecolabel was launched last year by (IIMA) and (CIIE). It is the first certification of its kind in India, though the idea of ecolabeling has taken off worldwide as a practice to identify products with commendably low environmental impact over their entire life cycle. The emergence of The Green Signal marks an important step toward encouraging greener business practices and empowering Indian consumers. In order to receive the Ecolabel, GreenNGood.com had to be rigorously audited by consultants approved by the. The Green Signal. Judged based on their performance in energy conservation, waste management, carbon emissions, and more, GreenNGood.com received 4 Green Signal Bars for disclosure of GHG Emissions, Excellence in Material Waste Reduction and Management, and Excellence in Energy Conservation. “We feel that this achievement is important because it sets a good example that e-commerce can be done in a way that brings about environmental and social change in the country,” commented Aparna Bhatnagar, Co-Founder of GreenNGood.com. “With e-commerce growing rapidly in India, its impact on the environment and society will start to matter as much as in any other line of business. E-commerce need not just be about making quick bucks, but can also be a healthy triple bottom-line business that creates benefits for society at large.” In response to the certification of GreenNGood.com, Mr. Vivek Gilani, Co-founder and Member Secretary of the Steering Committee of the Green Signal, commented on the significance it holds for Indian businesses and consumers alike. “The act of granting the first Green Signal Ecolabel in India to these two sustainability leadership enterprises in India – CGH Earth Hotels and GreenNGood.com is in my mind the first assertive and visible action to make sure that genuine environmental best-practice organisations in India beat the ‘greenwashers’ in the race for capturing the consciousness of the conscious consumers of India – and do it not through words, but through the transparency of numbers and data disclosure,” explained Mr. Vivek Gilani. “These SME organisations have voluntary disclosed their environmental impact, carbon emissions, and quantified their conservation practices with meticulous detail in a manner that is scarce in the Indian context. They’ve gone beyond the lure of ‘Carbon Credits’ and looked to catalyze change in themselves and in their respective industries through the only genuine method of mitigating climate change – domestic action to become resource, energy and carbon efficient.” The certification of
GreenNGood.com under The Green Signal ecolabel is a milestone achievement in the movement toward ensuring genuine environmental business practices and transparency for Indian consumers. The accomplishment is as important in its promotion of better business practices as it is in its ability to empower consumers to be able to choose products that minimize their own environmental impact and live greener lives. x

4.2 CGH Earth Hotels (Casino Group of Hotels)

At CGH Earth, nature and the environment take centre stage. Every experience is inspired by and built around this core, be it the forests at Spice Village or the fishing villages of Marari Beach. The structures become part of the landscape, using natural as well as modern materials to blend in. Modern day life fades into the background, allowing user to experience nature in its most pristine form. At CGH various environment friendly exercises take place as follows.

Rain water harvesting there was the eco-friendly solution, helping to become self-sufficient in this regard. Hotel even helped a school in Gokarna overcome its perennial water supply problem by implementing the same system there. Wastewater is also treated and recycled. Waste management is another area where it has focused. Vermicomposting at Spice Village and Swa Swara helps convert dry leaves etc. into environmentally sound fertilizer, besides adding lost nutrients back to the soil.

Bio-gas plants, another initiative, help convert kitchen and solid waste into cooking gas and organic fertilizer. This is used for organic farming. xi For such practices at CGH earth, it has won the first Green Signal Certification. xii

V) Organisations that received The Eco tel certification

The Orchid became Asia's first Five Star hotel to win the ECOTEL certification shortly after opening in May of 1997 and today (January 2011) is the only Hotel in the World to win over 84 international / national awards in 13 years from inception. Under the management of The Orchid Owner Vithal Kamat, the hotel has earned more environmental accolades than any other hotel in the world. With this latest achievement, The Orchid becomes one of only six hotels in the world to maintain top-level, "five-globe," ECOTEL certification.
3.4.2. Self Claimed /Not Certified by any of the Government of India Eco labeling organisation Products/Companies

It has been observed that, even though, government of India has the mechanism for labeling Eco friendly products, some manufacturers do not get eco label for various reasons. Still they advertise their products as environment friendly. To some extent these claims may be true, but majority took the advantages by claiming environment friendly. This act of manufacturers is termed as Green washing.

Green washing or “green sheen” is a form of spin in which green PR or green marketing is deceptively used to promote the perception that an organisation's products, aims and/or policies are environmentally friendly. Evidence that an organisation is green washing often comes from pointing out the spending differences: when significantly more money or time has been spent advertising being "green" (that is, operating with consideration for the environment), than is actually spent on environmentally sound practices. Green washing efforts can range from changing the name or label of a product to evoke the natural environment on a product that contains harmful chemicals to multimillion dollar advertising campaigns portraying highly polluting energy companies as eco-friendly.

2.1 Examples of Green Washing in India

1. A consistent use of misleading and contradictory marketing campaign by Toyota, for which Consumers International (CI) conferred on it the “Green scrubbing Award for environmental impact 2008”.

2. The Coca-Cola company announced to become “water neutral”, despite the fact that it continues to destroy water resources in India. San Francisco-based India Resource Centre charged the company with releasing untreated wastewater into surrounding agricultural fields and canals in Uttar Pradesh. The company has been also accused of illegally seizing lands of farmers and dumping toxic wastes on areas surrounding many of its bottling plants in India

3. HCL Computers (India) talked on its website about striving to phase out toxic polyvinyl chloride (PVC) and brominated flame retardant (BFR), once economically viable solutions exist. Greenpeace termed it a “misleading green wash”. It reminded the HCL that it cannot evade Responsibility by voicing vague aspirations, with no
clear commitments to phase out all toxics and implement a free and easy take back system.

3.4.3 Self Claimed/Unbranded, Locally manufactured, small scaled Eco friendly products/Industries

The segment which is purely environment friendly but away from commercialization can be identified as self claimed/unbranded, locally manufactured products and services. This industry is characterized by products and services that are available at local market, manufactured by natural processes, with natural ingredients. Organic food, herbal cosmetics, handicraft products are the few examples of such industry.

As defined by The Agricultural and Processed Food Products Export Development Authority (APEDA) “Organic products are grown under a system of agriculture without the use of chemical fertilizers and pesticides with an environmentally and socially responsible approach. This is a method of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, good plant nutrition, and sound soil management, produces nutritious food rich in vitality which has resistance to diseases”

In differentiating the term Natural and Organic, U.S. Food and Drug Administration (FDA) in one of its reports mentioned following: Although organic foods are natural by definition, The term "natural" applies broadly to foods that are minimally processed and free of synthetic preservatives; artificial sweeteners, colors, flavors and other artificial additives, grow hormones; antibiotics; hydrogenated oils; stabilizers; and emulsifiers. Most foods labeled natural are not subject to government controls beyond the regulations and heath codes that apply to all foods. Exceptions include meat and poultry. The Food Safety and Inspection Service (FSTS) of the U.S. Department of Agriculture (USDA) requires these to be free of artificial colors., flavors, sweeteners, preservatives and ingredients that do not occur naturally in the food. Natural meat and poultry must be minimally processed in a method that does not fundamentally alter the raw product. In addition, the label should explain the use of the term natural, e.g., no artificial ingredients.
“Organic “refers not only to the food itself but also to how it was produced. Foods labeled organic must be certified under the National Organic Program (NOP), which took effect October 21, 2002. They must be grown and processed using organic farming methods that recycle resources produced. Foods labeled and promote biodiversity --- two key elements of environmentally sustainable agriculture. Crops must be grown without using synthetic pesticides, under the National bioengineered genes, petroleum-based fertilizers and sewage sludge-based fertilizers. Organic livestock must have access to the outdoors and be given no antibiotics or growth hormones.xvi

As per these guidelines, local farmers, grow crops, vegetables and fruits and sell those in local and nearby markets as organic foods.

3.1. Self Claimed Eco friendly products available in India

1. **Handmade Paper** - Use of non-wood raw materials, thus saving trees. Made with pollution free methods as solar energy is used extensively. Acid free. Higher tensile, bursting, tearing and double-fold strength as compared to mill made paper. Fine and elegant quality.

2. **Paper Bags and Notebooks** - These Paper Bags are either made of virgin wood pulp or recycled paper or handmade papers. Most paper bags are made from Kraft paper. Kraft paper may be unbleached (brown) or bleached (white) and can be made in a wide variety of strengths or thickness (called "weight" by the industry).

3. **Eco Furniture** - Eco-furniture made with endurable materials can be easily separated and re-recycled, representing an easier, softer way to go green in your home. And the possibilities are endless and enthusing. Today, there are desk with a removable top and legs that can be disassembled and put into a recycling bin in less than fifteen seconds to change its design. There are chairs made from straw particleboard and recycled steel. Currently, the industry and the market is packed with Eco-furniture made of wheat panels, sunflower board, aluminum, poly woods, wrought irons, metals, stones, post consumer materials, all of which are available in attractive designs and colours.
4. **The Eco-Fan** - Eco-Fan is a soundless, powerful (up to 150 cfm) fan that stands on top of your woodstove to help distribute warm air throughout your house but doesn't use electricity! This environment friendly freestanding heat-powered Eco-Fan is designed to improve the efficiency of a wood stove by circulating the warm air produced by the stove. When placed on top of a heated surface, the Eco-Fan generates its own electricity. Temperatures of operation range from 150 degrees to 700 degrees Fahrenheit. The Eco-Fan does not use any batteries or external electrical connections. The fan has a thermoelectric module which acts as a small generator to power the fan's motor. When this generator module experiences a heat differential between its top and bottom surfaces, it creates electricity. The bottom surface of the module is heated by the wood stove, while the top of the module is kept cool by the fan's top cooling fins. The speed of the fan varies with the stovetop temperature; on average.

5. **Eco Shoes** - The Eco-Shoes are shoes, which can be recycled and reused. Today, numerous shoe making organisations are coming forward with eco-friendly shoes. This footwear mostly comprises of Recycled rubber, recycled plastics, waste products, textiles, and other synthetic products.

6. **Eco Friendly Paints** - The Eco-Paints are produced from fewer than 250 chemical components and more than 98% of these chemicals are naturally derived from plant sources and minerals. Most of the ingredients have been used for centuries or more. The raw materials that are low in toxic substances, renewable and feature a low environmental footprint. In the Eco-Paints, the paints, stains, thinners and waxes are made from naturally-derived raw materials including citrus peel extracts, essential oils, seed oils, tree resins, inert mineral fillers, tree and bee waxes, lead-free dryers and natural pigments.

7. **Handicraft Products** - Eco-Friendly Handicraft Items are made of jutes, waste materials, handmade paper products, poly wood products, fabric products, handmade greeting cards, recycled bottles, recycled products, biodegradable products, etc. In the making of Handicrafts Items there is less use of energy. As the products are mostly made in homes.

3.4.4 Market of Eco friendly products in Satara District.
An overview of eco friendly products industry in India

As described in precious section, Eco friendly product Market of Satara district is comprised of all the three categories.

1. **Government of India Eco labeled Eco friendly products /Companies**

   Following eco labeled products are available in the market of Satara district.

   1. Energy Efficiency Labeled Products-Refrigerators, Air Conditioners, Ceiling fans, Colour TVs, Storage Water Geysers, Washing Machines
   2. Rustic Art brand of eco friendly laundry powder, Soap, Gel, Bio Laundry Flakes, Shampoo, Manufactured by Erina Eco Craft Pvt. Limited, Satara, Maharashtra,

2. **Self Claimed/Not Certified by any of the Government of India Eco labeling organisation Products/Companies**-

   This market is highly scattered in Satara district. It was not possible to collect the information about products that belongs to this category

3. **Self Claimed/Unbranded, Locally manufactured, Small scaled Eco friendly products/Industries**

   The vegetable market of Satara city can be categorized in this class. Farmers from nearby villages brought organic vegetables, like Brinjal, leafy vegetables, coriander etc. from their farm for selling in local vegetable market.

1. **Government Initiative for promoting manufacturing of Eco friendly products.**

   1. Department of Environment of Government of Delhi has fourteen plan schemes for undertaking various programmes which would facilitate increased environmental awareness amongst the citizens of NCT of Delhi. The programmes are multi-dimensional in nature and include research projects, actual field oriented activities and specific campaigns aimed at educating the general public. These programmes are carried out as per the plan schemes. One of the schemes of this program is “Assistance to NGOs in the Promotion, Conservation and Preservation of Environment.” One of the aim of this scheme is “Promotion of Manufacturing Eco-Friendly Products from recycled plastics, handmade paper etc.”
An overview of eco friendly products industry in India

The Hon’ble High Court of Delhi UICWP No. 6456/2004 has directed that suitable action plan for encouraging/promoting manufacturing of products made out of recycled plastics into dustbins, mats, cloth, hangers etc. This issue has been taken by the Dept. of Environment with Khadi & Village Industries commission they have informed the Dept. that under the KVIC “Prime Minister Employment Generation programme” the scheme for manufacturing of products made out of recycled plastic, manufacturing of handmade paper bags etc are available. Interacted individual members as well as NGOs can undertake such programme and can avail assistance. For Further details refer the KVIC website at http://www.kvic.org.in/ or contact, Directors State office, KVIC, Choudhary Building, Canugat Place, New Delhi.xviii

2. Non Government Organisations (NGOs) dealing in promoting consumption of Eco friendly products.

1. Evergreen Mission Community Development Services

Evergreen Mission Community Development Services is a nonprofit voluntary organisation committed for Community development. It works for the betterment of human life by helping individuals and communities to identify and overcome the obstacles that prevent them from leading life in its fullness. The founding members of the Society are seasonal Social Service workers who were engaged in Social work by their own in co operation with local Charity Groups. All of them felt the need for an organized effort to bring their activities in a professional manner under a Single Umbrella Network so that the individual efforts could yield better benefits to the communities they serve. From this long deserving attitude of the members the present Evergreen Mission community Development Services was registered. Started on humble beginnings on a regional level, it now intends to expand service.

It work for the environmental issues in following manner

Self Employment Project Supported By Evergreen Mission-Through this project it helps sales and sale Promotion of Eco - friendly health and home care products ; Vegetables & fruits ; Diary and poultry products; Home made products made by individuals, Self Help Groups like Janasree, Kudumbasree, Mahila Samajams etc. xix
2. International Resources for Fairer Trade

International Resources for Fairer Trade is dedicated to empowering farmers, artisans, companies and NGOs to develop business capacity and promote sustainable livelihoods for all of those involved in producing the things we consume every day. Established under the Bombay Public Trust Act in the year 1995, IRFT has been working at the intersection of business and development for almost 15 years, giving farmers and artisans access to mainstream markets while encouraging large businesses to incorporate social responsibility and transparency into their core values. By working with both ends of the supply chain, IRFT ensures a fair deal for all. For such work for farmers, organisation received a recommendation letter from Better Cotton Initiative on 28th Feb., 2014 as below.\textsuperscript{xx}

3.5 Conclusion

As an effort to shed a light on Eco friendly product industry in India, researcher observed that, every stakeholder of a society understood the importance of being Eco friendly. As mentioned in the chapter, government of India has its own Eco mark scheme, for certifying an Eco friendly product. State government of Delhi, took initiative in manufacturing and promotion of Eco friendly products through schemes. Medium, Small, Large enterprises, NGO’s, all are trying their bit to provide Eco friendly products to end users. Nevertheless, it has observed that, the actual beneficiaries are far away from this. With the perpendicular growth in terms of no. of rising eco friendly industries, the market should also expand horizontally so as to reach to maximum no. of citizens.

The next chapter will talk about data analysis and interpretation. The data Collected from primary source were analyzed by using various statistical tools and presented in tables. Chapter will discuss about opinions of stakeholder and hypothesis testing.

1. \textsuperscript{http://cercenvis.nic.in/14.4.2014,2.50Hrs}
2. \textsuperscript{http://www.cpcb.nic.in/criteria_ecomark.php, 14.4.2014,3.10Hrs}
3. \textsuperscript{http://www.cpcb.nic.in/criteria_14.4.2014 3.20 Hrs.}
4. \textsuperscript{http://cercenvis.nic.in/14.4.2014,3.10 Hrs}
5. \textsuperscript{http://cercenvis.nic.in/14.4.2014,3.25 Hrs}
An overview of eco friendly products industry in India