

## a lifestyle & shopping guide



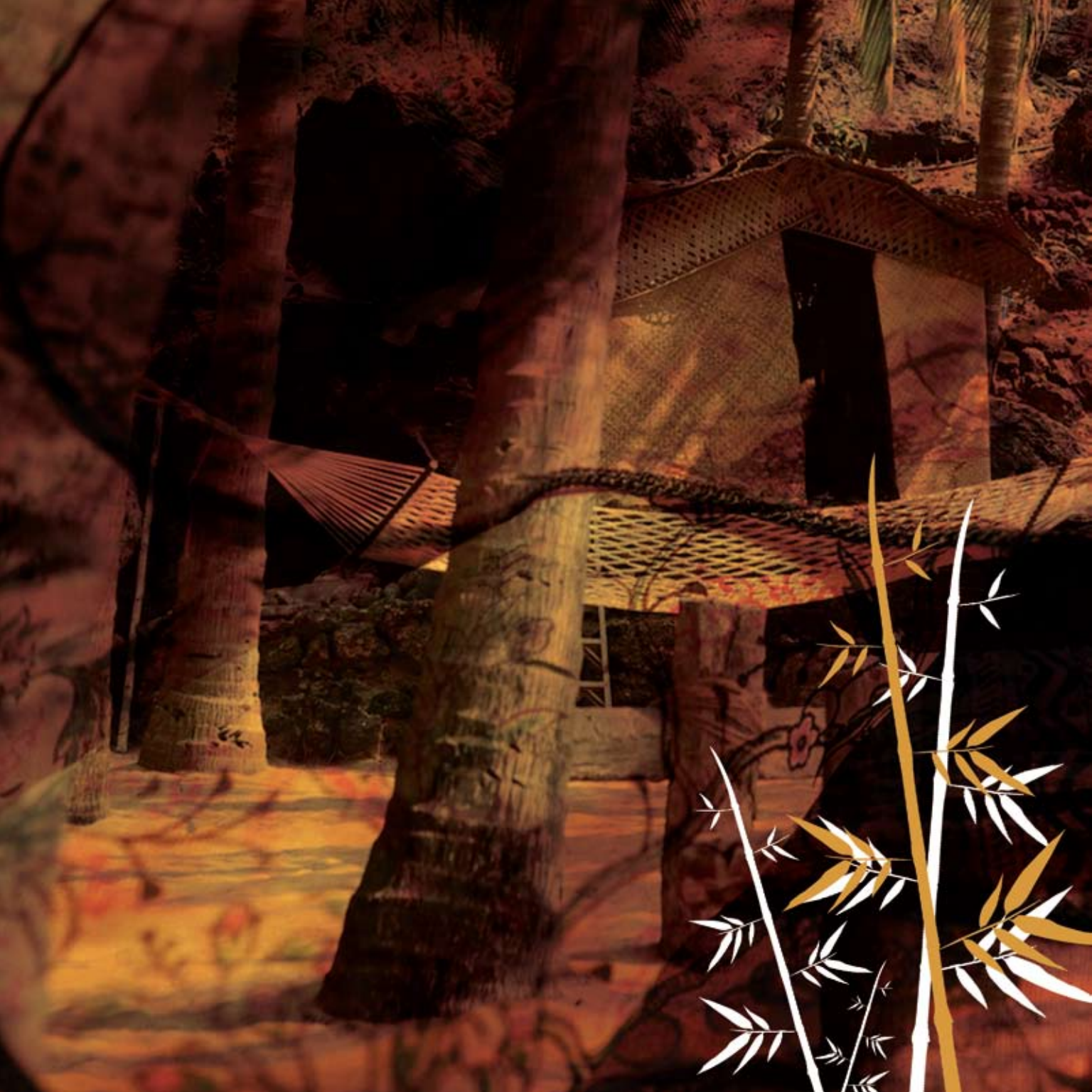
# SUSTAINABLE SHOPPING BASKET

A lifestyle & shopping guide



# CONTENTS

|           |                                                                              |           |
|-----------|------------------------------------------------------------------------------|-----------|
|           | <b>Foreword</b>                                                              | <b>09</b> |
| <b>01</b> | <b>DO WE HAVE A CHOICE AT ALL?</b>                                           | <b>11</b> |
|           | The Indian Bazaars                                                           | 13        |
|           | The Need for a Sustainable Shopping Guide                                    | 14        |
|           | What is Sustainable Consumption?                                             | 15        |
|           | Sustainable consumption can be pocket friendly!                              | 16        |
|           | A short note on sustainability, organic products and the fair trade movement | 16        |
| <b>02</b> | <b>DAILY SHOPPING</b>                                                        | <b>21</b> |
|           | Plan your Shopping                                                           | 23        |
|           | Food                                                                         | 24        |
|           | Textiles                                                                     | 30        |
|           | Washing and Cleaning                                                         | 36        |
|           | Transport                                                                    | 38        |
|           | Cosmetics                                                                    | 40        |
|           | Toys                                                                         | 43        |
| <b>03</b> | <b>RARE PURCHASES</b>                                                        | <b>45</b> |
|           | Appliances and Gadgets                                                       | 47        |
|           | Travel                                                                       | 54        |
| <b>04</b> | <b>MAJOR PURCHASES</b>                                                       | <b>59</b> |
|           | Green Buildings                                                              | 61        |
|           | Vehicle                                                                      | 64        |
| <b>05</b> | <b>BUYING RESPONSIBLY AT FESTIVALS</b>                                       | <b>67</b> |
| <b>06</b> | <b>EXPLORING THE 3RS</b>                                                     | <b>71</b> |
|           | Closing the cycle of responsible consumption                                 | 74        |



## Foreword

“Most people in India are ready to opt for more sustainable shopping choices provided they get trustworthy information on the sustainability of products and services. The Sustainable Shopping Guide provides this information as far as it is available. Existing sources of information like product labels and comparative tests are presented in the Guide to assist private households in making their every day shopping decisions in a sustainable way. The Sustainable Shopping Guide is also a Lifestyle Guide on how to avoid unnecessary environmental degradation while keeping healthy and saving money at the same time.

In the process of collecting relevant information it became clear that there is still a substantial lack of transparency regarding the environmental and social quality of production processes in India. Many producers certified for their environmental and social standards mainly export their products and do not yet see a market in India where such standards are relevant to consumers. Others do sell their products in India but consumers are not able to recognize them for lack of information. An important challenge for sustainable development in India is therefore to improve the availability of labeling schemes and strengthen the existing approaches of comparative testing to enable consumers to make the right choice.

According to the Greendex Index 2010 Indian consumers are the most sustainable in the world. If you take the overall numbers this may be true. But if you look closer you realize that the main reason for this is not that most people voluntarily commit to a conscious and sustainable lifestyle. Rather  $\frac{3}{4}$  of the Indian population are not yet able to become a part of the consumer class although they would like to. Since nobody can seriously ask the poor to remain poor for the sake of sustainable development the concept of sustainable consumption becomes increasingly important in India as the consuming middle class is growing at great pace. Our studies have shown that the level of awareness on sustainable consumption patterns is very low especially in rural areas.”

---

**Mr. Stefan Helming**  
Country Director, GIZ in India

**Dr. Dieter Mutz**  
Director GIZ-ASEM

GIZ-ASEM Project “Consumer Protection  
and Sustainable Consumption in India”

# DO WE HAVE A CHOICE AT ALL? 01







Indians have the advantage of a vast storehouse of traditional knowledge and access to the world's best technologies and scientific knowledge. Mixing and matching both for sustainable consumption is a promising strategy. Regional and national good practices can be consciously adapted to suit individual needs and preferences, as is indeed already being done. The idea is to maximize use of our traditional consumer ways alongside modern trends in order to make responsible shopping accessible and easy.

### THE INDIAN BAZAARS

India's markets or bazaars have largely been supportive of sustainable consumer ways. Most old markets still have buyers flocking to shops with their own bags for goods. In fact, small town India continues to have vendors and hawkers coming door-to-door selling wares on foot, cart or cycles.

This mobile bazaar is not only more convenient and extremely personalized, but it brilliantly reduces our carbon footprint by omitting the need to travel (by car, bike or other vehicles) to the market to buy.



### QUOTE



"Climate change is for real. We have just a small window of opportunity and it is closing rather rapidly. There is not a moment to lose."

**Dr. Rajendra Pachauri,**  
Chairman, Intergovernmental Panel on Climate Change

THE IMPACT OF INDIVIDUAL CONSUMPTION ON THE ENVIRONMENT

The effect individual consumption has on the climate is substantial. Globally, consumer behavior impacts greenhouse gas emissions (GHG) most of all. The food we eat accounts for almost a third of our climate impact. Household energy consumption produces another fourth of worldwide GHG emissions. The transportation sector for local (primarily cars) and international travel (by plane) further produces a lion's share of GHG from consumers. This is especially true in India, with the staggering number of more than one billion consumers and a financially solvent middle class of currently more than 250 million people, and rapidly rising. Every single consumer has the potential to mitigate climate change by changing his or her consumption behavior.

NEED FOR A SHOPPING GUIDE

Do Indian households really need a sustainable shopping guide?

THE ANSWER IS: YES, THEY DO!

Questioning the need of a sustainable shopping guide for India is a valid thing to do as most of the labels and initiatives concerning sustainable shopping mentioned in the guide have only to a small extent or not at all been introduced to the Indian market. Yet it is also true that it is only a matter of time until the concepts of sustainable goods and services will become a serious alternative. Soon questions like 'Do I really need this product? Or How much is enough?' will pop into the heads of shoppers when making their shopping list or buying a new TV.

We find ourselves at the beginning of a change in consumption behavior in India. It's all about being prepared and knowing which labels to watch out for in the near future. Find out more about these under the headings 'In the pipeline' throughout the guide. The proposed ideas might be overwhelming at first, so take your time considering what might apply to your household. Congratulations on taking the first step towards sustainable consumption by reading this guide!

GREENDEX 2010

The Greendex Survey 2010 initiated by the National Geographic Society and the international polling company GlobeScan states that India is the top-scoring environmentally friendly consumer society. It was also noted that India's environmentally sustainable consumer behaviour had increased the most between 2008 and 2010. Nevertheless, a large part of India's population manages with less than a few hundred Rupees per day which leaves them no other choice but to consume less, buy locally and travel by bike or on foot. This needs to be taken into account when looking at India's top-scoring results in the Greendex Survey.

At the same time 40% of the Indians taking part in the survey said that the issue of climate change is exaggerated and that this kept them from taking eco-friendly decisions. In comparison, all the other countries in the survey only had 25% making this argument. This perception might slow down and even stand in the way of a long-term change towards sustainable lifestyles in India.



WHAT IS SUSTAINABLE CONSUMPTION?

Consumption is not a straightforward process. When we buy a commodity we are also responsible for the process it goes through to reach us. Under what conditions was an item of clothing or a new computer manufactured? Were workers paid fair wages? Were they exposed to harmful substances during the production process? Which products and which companies do I want to support with my purchases? Do I buy food in a supermarket, around the corner at a local vendor or at a weekly outdoor market? How will the product ultimately perish – will its destruction lead to polluting the earth, water or air?

The price we pay for a product or service (like tourism) often does not reflect these “hidden” costs. Yet they're very real.

The term “sustainable consumption” refers to selective consumption based on awareness of the environmental, social and economic aspects of consumption.

MYTH AND REALITY

**Myth:** Living sustainably is more expensive.  
**Reality:** Contrary to popular perception, sustainable consumption need not necessarily be more expensive. In fact, it might actually just require the consumer to take another look at some the more traditional Indian ways of living which are also more cost-effective.

**Myth:** Price is the only factor that drives people away from sustainable consumption.  
**Reality:** The Greendex survey showed that costs were not the most important reason keeping survey participants from being more environmentally active. It was rather the thought of companies making false claims about their products' environmental friendliness that discouraged consumers from living more sustainably.



## There are five key tenets that help you buy responsibly:

- i) Avoid buying if you don't really **NEED** it
- ii) Each time you buy you **MODIFY** the environment forever
- iii) Explore **CONNECTIONS** before you buy
- iv) Find out **ALTERNATIVES** to goods you buy, pick from among the best ethically and environmentally
- v) Make positive changes to your **BUYING BEHAVIOUR**, celebrate your good decisions!

### The power to buy is yours!

As a consumer you have more power than you think, as business enterprises react sensitively to declining sales. Using alternatives to existing mainstream consumer trends is a powerful choice each of us has in India today. We have the option to buy goods that are environmentally less harmful, ethically produced, organic and respectful of our indigenous people and traditions. This does not mean behaving like a consumer “hermit” – it only means thinking a little bit about what you buy.

## SUSTAINABLE CONSUMPTION CAN BE POCKET FRIENDLY!

Here's how -

- **Buy** local and seasonal food products.
- **When you purchase a product** make a conscious thought on the usefulness of the product.
- **Instead of driving**, walk or use a bicycle
- **Sell or donate unwanted goods** such as clothes or books. Likewise, buying secondhand goods from garage sales is a great way to buy new clothes and save some money.
- **Reduce meat consumption:** Meat products contribute heavily to our ecological footprint. Try reducing your meat consumption to 3-4 times a week.
- **Turn appliances off** instead of leaving them on standby and you can save up to 5 percent from your electricity bill.

## A SHORT NOTE ON SUSTAINABILITY, ORGANIC PRODUCTS AND THE FAIR TRADE MOVEMENT

Unfortunately, a lot of concepts concerning alternative methods of growing or trading products are being confused with one another in the global public domain. ‘Organic’ and ‘fair trade’ are not the same. Likewise, the term ‘sustainable’ is supposed to integrate the two but mostly is too vague when applied to the production process. At the same time the fair trade movement needs to be differentiated from the internationally distinguished Fairtrade label provided by the Fairtrade Labeling Organizations International (FLO-I).

### Fair trade goods

- Fair trade products are certified by one of the several certification agencies existing throughout the world. Many of them do not operate in India at the moment, but are gradually making their entry.
- More certifying agencies want to move from certifying ‘only’ the raw material like cotton e. g. to certifying the full production process including every single step involved in converting the raw material into the usable, finished product.
- Fair trade labels for foodstuff and natural textiles do not give any information about the use of chemical pesticides in production. However, fair trade certification agencies have started to integrate the reduction of chemical pesticides into their standards and are moving towards environmentally sustainable practices as well.
- The purpose of promoting fair trade is to improve the living and working conditions of economically disadvantaged farmers and artisans.

India is home to a significant number of fair trade certified producers. Most fair trade products made in India are exported to markets in other countries where the fair trade labeling is in place. The Fair Trade Forum – India (FTF-I) is the Indian national network for Fair Trade. It is working to develop a label that certifies fairly produced foods and other products in India.

### Organic goods

- Are certified by one of the several certification agencies existing throughout the world.
- Guarantee the absence of chemical pesticides or alterations like genetic modification in the production.
- Mostly, natural raw materials like cotton are certified as organic – this does not however state the conditions in which the garment made out of the cotton was manufactured.
- A lot of organic products come from India but are exported to markets in other countries where the organic labeling is fully in place.

### Ecomark India

#### A label for environment-friendly products

Ecomark India is a government operated seal of approval program for environmentally preferable consumer products.

To increase consumer awareness, the Government of India launched the eco-labelling scheme known as ‘Ecomark’ in 1991 for easy identification of environment-friendly products. The criteria follows a cradle-to-grave approach, i.e. from raw material extraction, to manufacturing, and to disposal. The Ecomark label is awarded to consumer goods that meet the specified environmental criteria and the quality requirements of Indian Standards.





### Consumer magazines: Consumer Voice and Insight

In India, two magazines are regularly published by impartial and highly respected Consumer Rights organizations. The organizations actually test the products, sometimes to the point of destruction, and give consumers a fair and impartial perspective of their quality, performance durability, safety and – importantly – their environmental impact. For instance, they will rate different brands of, say, ceiling fans not only from the quality and performance viewpoint, but also for their energy consumption.

The magazines follow a strict code of conduct – they do not accept advertising so that no-one can accuse them of being biased for or against a product. They depend on subscriptions and support from the Ministry of Consumer Affairs. Subscribe to them and share your experiences with them – you will be doing yourself and other consumers a lot of good.

#### For subscription information visit:

- ▶ [www.consumer-voice.org](http://www.consumer-voice.org)
- ▶ [www.cercindia.org](http://www.cercindia.org)
- ▶ [www.whichrightchoice.com](http://www.whichrightchoice.com)



#### QUOTE



“Today we have reached the point where consumption and people’s desire to consume has grown out of proportion”

**Dr. Rajendra Pachauri,**  
Chairman, Intergovernmental Panel on Climate Change







Actually, “daily” is probably not fully correct. We mean purchases which are made on a regular, recurring basis, such as vegetables, fruit or meat. Due to the regularity of the shopping, daily items offer the possibility to take small but significant steps towards a more sustainable lifestyle.

#### PLAN YOUR SHOPPING

- Make a list. It is helpful to make a list before you go shopping so that you don't end up buying things you don't really need and thereby produce extra waste.
- Do all your shopping locally. If you shop locally - preferably from shops and/or farms that make or obtain their produce locally - you will cut down on the need for transport and, therefore, harmful carbon dioxide emissions.
- Consider transport options. If you need to use transport to go to the market, go for the least damaging option.
- Make single shopping trips. In order to cut emissions and save time it's worth doing all of your shopping at once.
- Shop together as a household. If you live with a family or in an apartment block, you can minimize costs and carbon emissions by coordinating your shopping. This will cut on fuel costs and the amount of shopping you will need to do.
- Invest in a sturdy recycled carrier bag for all your shopping trips.

#### QUOTE



“We share the earth not only with our fellow human beings, but with all the other creatures.”

**Mahatma Gandhi**



A sustainable shopping bag should mainly contain:

- healthy food
- organic products
- seasonal fruit and vegetables grown locally
- only small amounts of meat products
- products made locally
- food with minimal packaging

Every meal consumed takes energy to grow, process, store, transport, sell, cook and discard. In India, food and nutrition are woven into the cultural and religious fabric of every region.

While the historical influence of five thousand years of food culture holds sway over a large part of India, urbanisation, and the popularity of quick-fix fast food has created a situation of culinary and nutritional confusion in several Indian minds and homes.

Buying fresh from the mandi

India is home to the mandi, the traditional vegetable market which gets its supplies from the farm or direct distributors while supermarkets may store food from cold storage. Most often this is food that has been stored and frozen for days and has a low nutrition value. Also cold storage, transportation and import of food items add to the carbon foot-print and emissions. It is preferable to consider seasonal variations when buying fruits and vegetables as they taste better when consumed in season.

ATTA CHAKKI

Wheat and rice are an integral part of daily food consumption in India and should therefore be of the best quality. Traditionally, the atta chakki has had a firm place in every Indian kitchen but nowadays has been replaced with branded atta produced in industrialized mills. However, it is questionable if refining, bleaching and enriching the flour with chemicals ensures higher nutritional quality. The production process involves high temperatures that destroy many nutrients in the flour which then have to be added back manually. The atta chakki may be a little old fashioned but one does not have to own one in order to experience the lovely smell of freshly ground flour. Finding your local grinder will contribute to living healthy and making a sustainable shopping choice.

CASE STUDY: DABBAWALLAHS

“Tiffins” or “Dabba Food” as it is known in many urban locations is a great stand by for urban homes. It is home-made, fresh cooked food made by housewives, looking out to make some money, while supplying food to the neighbourhood – particularly to office-goers and single working people. It is a good option when your gas cylinder gives up or you can’t be home to cook a hot meal. You can order complete meals at affordable prices.

Use a pressure cooker to cook rice and dal

| Activity              | Time (min) | Time (hr) | Total time in a yr (hr) | LPG used in a yr (kg)         | Annual CO2 emissions (kg) | Annual cost (Rs) |
|-----------------------|------------|-----------|-------------------------|-------------------------------|---------------------------|------------------|
| Cooking rice - 2 cups | 25         | 0.42      | 395.42                  | 69.99                         | 202.97                    | 1702.2           |
| Cooking dal – 1 cup   | 40         | 0.67      | 395.42                  | 69.99                         | 202.97                    | 1702.2           |
| Pressure cooker       | 25         | 0.42      | 152.08                  | 26.92                         | 78.06                     | 654.7            |
| Savings               |            |           |                         | 43.07<br>Approx. 3 cyl-inders | 124.90                    | 1047.5           |

\* Data sourced from the study by UNDP-GEF's low carbon toolkit

INDIAN SPICES AND SEASONINGS

Spices in Indian food not only provide enhanced flavour but are also used as preservatives, herbal remedies and even cosmetics. However, artificial dyes, pesticides and various toxins can contaminate them, but sustainable options are available.

Here are just two examples:  
**Haldi:** That bright yellow turmeric powder may have lead chromate in it to give you that irresistible yellow colour. If possible, grind the turmeric roots at home.  
**Chillies:** That fiery red could be added Sudan dye, a chemical possibly causing cancer. You could try home-ground chilli powder as an alternative.

A safe option is to look for the “Agmark” symbol which is certification from the government that the foodstuff is pure and unadulterated.

INDIAN BEVERAGES

India is famous for its food but few people know that it has an array of sustainable – and sustaining - drinks that are both unique and refreshing, have no artificial flavour, colour or toxic substances and are seasonal. Use these rather than the bottled version. Even packaged fruit juices are not as healthy an option as home-made drinks.

- 1. Lassi
- 2. Panna
- 3. Coconut Milk
- 4. Jal Jeera
- 5. Fresh Juices
- 6. Nimbu Pani

CASE STUDY:  
KITCHEN GARDENS

Kitchen gardens sound messy and more work but the truth is that a kitchen garden gives back manifold. Doing it smart is the key. Many vegetables can be grown in pots and need just basics like sun and water. Regular 12 inch pots yield lovely tomatoes, chillies, bottle-gourds etc. Smaller pots can hold herbs like coriander and mint effortlessly. Having a kitchen garden is immensely satisfying and provides greenery, fresh air and healthy and pesticide free veggies all through the year.

Yearly Co2 emission of a non-vegetarian person is 6500 pounds, a vegetarian 5500 pounds as compared to a vegan which is 4500 pounds.

NAVDANYA

Navdanya is a network of seed keepers and organic producers spread across 16 states in India. The network has helped set up 54 community seed banks across the country, trained over 500,000 farmers in sustainable agriculture and helped setup the largest fair trade organic network in the country. It has created awareness on the hazards of genetic engineering in the face of globalization and climate change. Navdanya is also a women centred movement for the protection of biological and cultural diversity.

Food packaging: How much is too much?

Packaging food makes it safer and less vulnerable to contamination. Unpackaged food can quickly become dry, moldy or spoiled. When choosing between loose and packaged staples, the branded varieties tend to be cleaner. Also, the ingredient list and packaging dates give you additional information on your food. On the other hand, loose varieties allow you to examine the product more closely. Try not to buy overly packaged foods. Consider buying larger sizes, sharing these with friends or neighbours if necessary, as single-portion sizes tend to use more packaging. Store the groceries in airtight containers, once you have opened the packaging.

IN THE PIPELINE:

**Organic Food: The real taste of nature!**  
Organic crops use manure to provide nourishment to the soil instead of chemical fertilizers produced by an energy intensive process. Crop left-overs, livestock dung and remains are made into manure which gives back the soil what it took from it. This cyclic rotation keeps the soil healthy and provides healthy food.

In India, only a very small percentage of organic food is available at speciality stores and supermarkets. So in the meantime you might see the label ‘organic in conversion’ soon on vegetables or fruit.

ORGANIC FARMING

Products labelled “Organic in conversion” come from producers who have started embracing organic farming recently. To be certified as fully organic, a farm needs to be free of all chemical residues in its soil and the process could take as long as 3-5 years. To support the farmers in this difficult phase of transition, products are sold with the indication “organic in conversion”.

GM CROPS

Genetically modified (GM) crops are those where the DNA has been inter-changed in a laboratory with another organism’s DNA. Eg. Bt brinjal, Bt cotton.

The long term scientific assessment of the potential and risks of GM crops is not yet complete and there could be health risks associated with genetically modified foods. Till then, a more sensible approach is the one of eco-friendly, organic farming. India had a long-standing tradition of sustainable farming, conservation of water, maintenance of soil fertility with minimal use of chemicals. This was abandoned in favour of the “Green Revolution” model of farming with intensive use of water, chemical fertilizers and pesticides. We as consumers are now in the position to demand a reversion to the older, healthier and environment-friendly farming methods.





### Watch out for this organic food label to come in 2010!

**UTZ Certified** is about transparency of origin and traceability to the final (agricultural) product. It offers coffee, tea and cocoa certification programs and manages traceability for RSPO (Roundtable on Sustainable Palm Oil) certified palm oil. Its aim is to achieve sustainable agricultural supply chains where farmers adopt sustainable and healthy practices and where consumers buy products which meet their standard for social and environmental responsibility. Coffees and teas which carry the UTZ CERTIFIED label are expected to be available in India by the end of 2010.



**An existing Indian label – take a look at this one on your next trip to the supermarket!**

**The India Organic label** is a government authority which provides national standards for organic products. Products with the India Organic label are grown without the use of chemical fertilizers and pesticides.



### Certification Standards in India

**The Participatory Guarantee Scheme** is an organic quality assurance system that is based on the Indian National Standards for organic products. It does not, however, rely on certification but is implemented and controlled by the organic farmers' and producers' cooperatives.



### Best practice example: Fairtrade label for food in India

Internationally, the most widely recognized ethical label is the **FAIRTRADE** Certification Mark. When a consumer product bears the mark it ensures that the product has been traded according to international Fairtrade Standards. An increasing number and variety of Fairtrade certified products are being sold on the Indian market. For instance, a large variety of Fairtrade Basmati rice from the Sunstar-Federation of Small Farmers of Khaddar Area is sold on the Indian market. An assortment of Fairtrade products like tea and coffee is also brought to Indian consumers by international brands like Clipper Teas.



**AGMARK Certification** is a standard controlled by the Government of India to ensure quality and purity of agricultural products. Certification of adulteration-prone commodities such as rice, pulses, butter, ghee, vegetable oils, ground spices, honey, wheat and atta is most common. The quality of a product is determined with reference to the size, variety, weight, colour, moisture, fat content and other factors.





# TEXTILES

Clothing in India varies widely and is closely related to local culture, religion and climate. Part of our personality is expressed by our clothing. Before we buy a new article of clothing, we decide – consciously or unconsciously – whether it matches our personal style of dress and whether we really want to go along with the latest fashion trend.

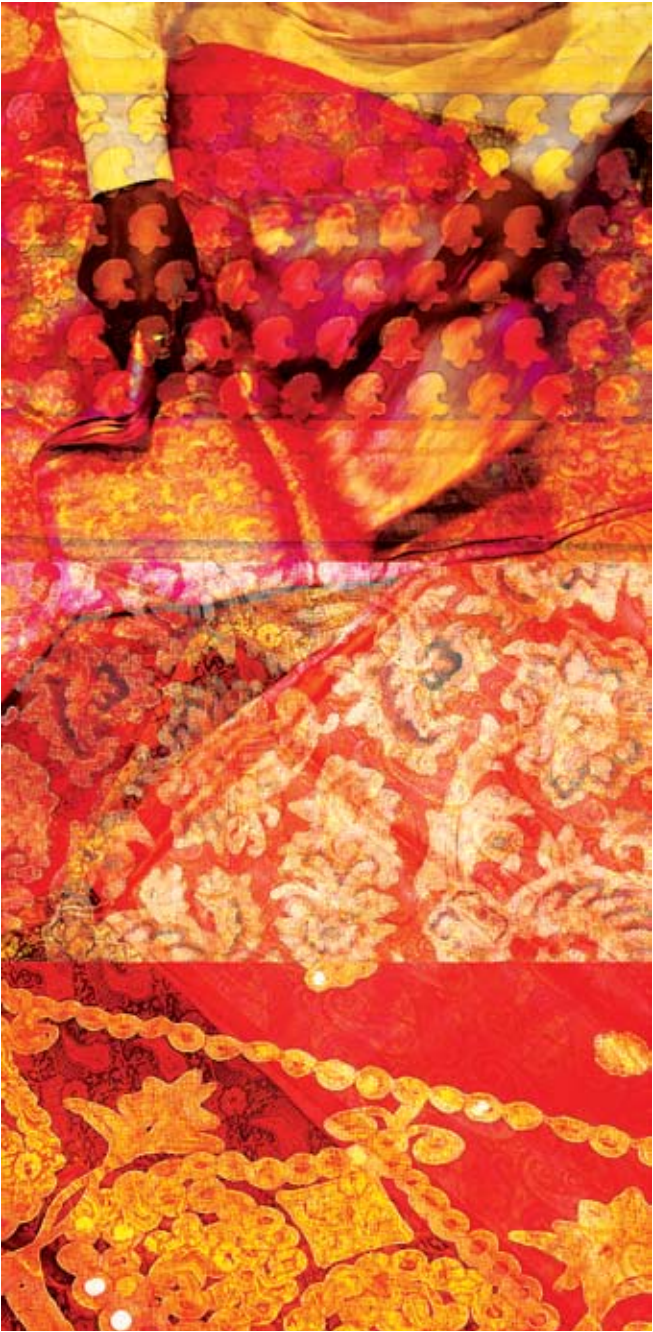
At first glance it is impossible to determine whether our clothing materials are harmful to our health and environment. Where the textiles were produced and who sewed them and under what social conditions the producers live and work often is often hard to determine.

**Consider the following aspects when you buy clothing:**

- Materials (e.g. organic cotton)
- Fair Trade labels
- Good workmanship and durability

**Tailoring, a Sustainable Choice**

One of the reasons why India remains a colourful country is the variety in colour, fabric and design of its garments. Having your garments made at a tailoring shop provides employment and saves costs that adhere to branded clothing, especially in marketing and advertising. Tailoring is a great way to customize your requirements and to maintain a personal style. Tailoring is also affordable and supports skill enhancement in the garment industry.



**Fair trade certification by “Shop for Change”**

A new initiative is the certification and labeling of fair trade cotton used to manufacture clothes in India. The NGO “Shop for Change” independently audits and certifies farmers as well as artisans and works to improve their livelihoods, train them on better and greener growing practices, empower farmers and women and ensure safe, healthy and non-discriminatory workplaces.



CASE STUDY: KHADI



Khadi or khaddar refers to varieties of hand spun and hand woven fabric using hand spun yarn, made from locally grown cotton, harvested by local labourers, spun into yarn and woven into cloth. Khadi weaving is labour-intensive. The precise technology involved in its production varies from region to region, as do the techniques used for its dyeing, embroidery or printing. Khadi’s growing importance caused a full scale reorganization of India’s textile industry as Mahatma Gandhi decreed that to qualify as Khadi, cloth had to be not only hand woven and locally produced but also made from hand-spun yarn. Today, the central government’s Khadi Gram stores retail Khadi couture created by almost all known Indian designer labels.





COTTON:  
(A SMALL REMINDER)



Cotton is the most popular natural fiber in the world. Nearly half of all clothing produced is made of cotton. Yet the cultivation of cotton poses hazards to our health and environment. Huge quantities of pesticides and fertilizers are used in the process. In fact, eight times more chemicals are used for cotton than for food crops. These fertilizers and pesticides release toxic chemicals in our waterways and ground water – harming marine life and our health as it enters the food chain. Another problem is the thousands of litres of water needed to produce cotton. As a result, rivers and lakes are drying out.

As consumers, we need to insist that the cotton cloth we buy is made from organically grown cotton. By asking the question repeatedly, the shopkeeper – and the entire supply chain behind him – will become aware of hanging consumer preferences, and organic cotton will become increasingly available.

As observed by Mr. Jay Kumar  
from the Fair-Trade forum.



“The Gandhian philosophy which envisioned self-reliant villages through gram-swaraj has an amazing similarity with the cause of the Fair Trade movement. The principles of Gandhian gram swaraj respect the needs of the marginalized just as human dignity was the leading light of the Fair Trade movement from the beginning. Another amazing similarity is the orientation towards handmade products, which are capable of directly serving people in distant villages.”



IN THE PIPELINE:

A promising label to make an appearance in India.

**What is MADE-BY?**  
MADE-BY originated in the Netherlands and is an independent consumer label for fashion companies who continuously improve and are transparent about the social, economic and ecological conditions throughout the supply chain of their collections. The mission of MADE-BY is to make sustainable fashion a common practice. Since 2006 MADE-BY garments are identified by a blue button near the care label. The blue button indicates the quality of the manufacturing process. If you see it, you will know that the brand produces its collections in a people and environment-friendly way. MADE-BY also offers an online Track&Trace system which follows the trail of the clothes from producer to the consumer. MADE-BY is working towards launching a MADE-BY sustainability label in India, which will assist brands in ensuring social, environmental and economic sustainability and communicate the same to the Indian consumer.



ANITA DONGRE



Anita Dongre, a leading Indian fashion designer, signed up with Shop for Change and launched 21 designs under the AND brand across 16 exclusive AND stores and select Pantaloons, Central and Shoppers Stop stores in India in April 2010. AND has so far bought 20 tons of Shop for Change certified cotton from farmers of Chetana, an organisation of farmers.

The cotton was bought at a price that included a 15% premium for Capacity Building and AND decided not to pass on the increase in cost of cotton to the consumers i.e. prices of garments were not increased. Anita has now decided to use fair trade cotton for garments throughout all her other brands.

Besides the Capacity Building Premium, the farmers benefit in terms of an assured market by virtue of the long term trading relationship that AND is committed to (in compliance with Shop for Change standards) as also the benefits of associating with a certified producer organisation.

FABINDIA



Fabindia is a retail brand that supports craftsmen from rural India. The products of fabindia are mainly sourced from villages helping to provide and sustain rural employment. Produced by over 40,000 artisans, the products encourage good craftsmanship and the brand claims to be natural and eco-friendly.

Labels and standards for garments in India: Have a look if these ‘fit’ you!

**Craftsmark:**  
The Craftmark initiative is an effort by the All India Artisans and Craftworkers Welfare Association (AIACA) to help denote genuine Indian handicrafts, develop sector-wide minimum standards and norms for labeling a product as a handicrafts product, and increase consumer awareness of distinct handicraft traditions.

**Handloom mark:**  
Handloom *mark*, a textiles committee under the Ministry of Textiles, Government of India, promotes handloom products in India and at the international market, assuring customers about the genuineness of the product origin and strengthening the network of handloom producers.

**Central Cottage Industries Emporium:**  
Central Cottage Industries Emporium, a Government of India undertaking, aims at becoming a premier organization in Developing, Promoting and Marketing quality Indian Handloom and Handicraft products.

Associated organizations

**Khadi Gramodyog Bhavan** is an Indian government supported organisation that works for a non-violent, non-exploitative social order as envisaged by Mahatma Gandhi. Towards attaining their objective of relieving the rural people from their existing poverty, Khadi & Village Industries sales are being stepped up steadily to provide employment to the rural masses.



# WASHING AND CLEANING

Day to day human life involves almost incessant washing and cleaning activities. Apart from large amounts of water being wasted, toxic chemicals used in the detergents and other washing material damage the ecosystem and aquatic life. These chemicals settle in the soil which is used by farmers for cultivation of fruits and vegetables. They then easily find their way back into our body and can lead to health damage.

However, there are ways to minimize this damage. People who use washing, dishwashing and cleaning products conservatively save energy and consume less water and chemicals. This benefits both the environment and leaves more money in their pockets. It also makes good financial sense to reassess your washing and cleaning habits and make appropriate changes:

- selection and dosage of washing, dishwashing and cleaning agents
- programme and temperature settings on washing machines
- application of simple household tips

### Laundry

Washing agents – how much is enough?

Instead of the large washing powder packages, try using super-concentrated “compact” versions wherever available, that don’t contain filling agents such as common salt and chalk. Also, try finding detergents in refillable packages, if possible. Concentrated detergents offer a number of advantages: more economical dosage, reduced water pollution, less required space, easier transport and less packaging. Both types of washing powder have the same cleaning power but because they are produced in different concentrations, they must be dosed differently as well. The right amount of washing powder depends on water hardness and the degree of soiling.

### THE SOAP NUT



#### Organic miracle detergent or outdated tradition?

Soap nuts or soapberries, also referred to as Washing Nuts or Ritha / Reetha (in Hindi), are the fruits of a tree that grows in tropical and subtropical regions. In India they have been used for washing and cleaning for centuries. Their shells contain ‘saponins’, which have the ability to clean and wash by producing a mild sud similar to soap.

Fans of the soap nut argue that they are highly-effective, gentle and leave the laundry fresh and clean compared to other detergents. Their mildness keeps colours bright, maintaining the fabric structure of the clothes. While they are cheaper for the consumer and biodegradable, comparative testing has found that their washing performance is not convincing. White laundry was found to be graying quickly and stains were not being effectively removed. It was also found that they were not fundamentally more ecological.

If you have tried the soap nut and are satisfied with its washing results, there is no need to change to branded detergents. But if you are using an ultra-compact, phosphate-free detergent responsibly, you are doing the environment no greater harm than necessary.

### HOUSEHOLD TIPS



Low temperatures are sufficient for most laundry as hotter temperatures consume more energy. Only for baby nappies or when contagious diseases are present, do you need higher temperatures.

It’s better not to use fabric softeners. They don’t make laundry cleaner, but pollute water bodies.

In case of hand washing make sure your laundry is not washed in natural water bodies as the detergents have a direct negative impact on the ecosystem. Washing at home increases the chance that the polluted water will be treated on its way back to nature.

The best way to dry clothes is by using the sun’s energy. Tumble dryers consume a high amount of energy, a clothesline uses zero fossil fuels.



# SUSTAINABLE COMMUTING & TRANSPORT

Sustainable transport (or green transport) means using more fuel-efficient, space-saving and healthier alternatives. The term refers to any means of transport with low impact on the environment, like low carbon fuelled vehicles. Depending on the distance to be covered, you have different choices.

### Short distances – think about downgrading

- Travel on foot a few kilometers instead of taking the car. It helps save money, gives you an opportunity to exercise and explore the locality.
- Use a bicycle wherever possible. It’s a sustainable and healthy alternative.
- Take a cycle rickshaw. Apart from being environmentally friendly, it is often the only means for the poor to make a living.

### Carpool to work

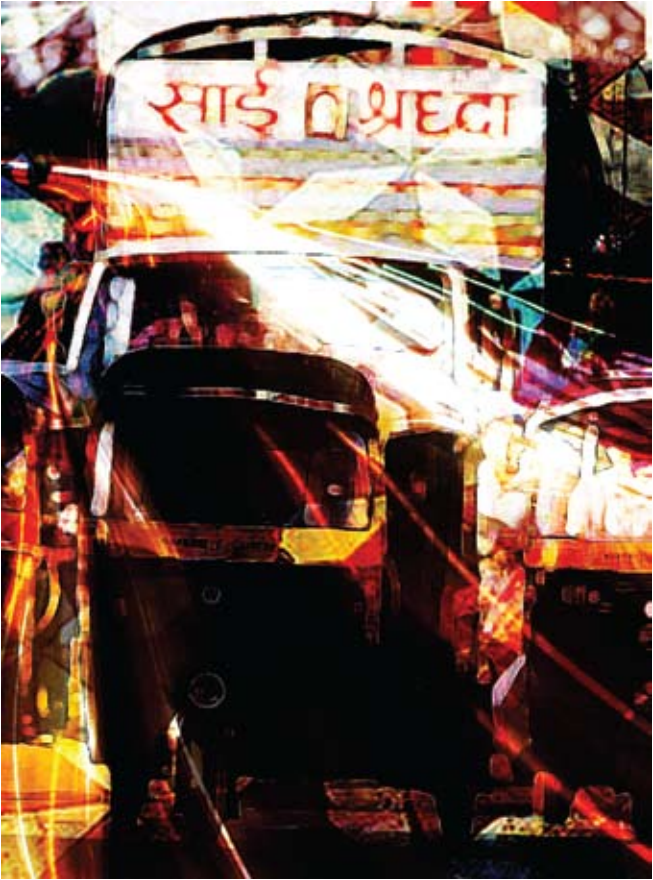
| Activity                           | Km/day | Km/year | Mileage (km/l) | Annual fuel consumption (l) | Emission factor (kg/l) | CO2 emission per year (kg) | Fuel cost (Rs/l) | Annual cost savings (Rs) |
|------------------------------------|--------|---------|----------------|-----------------------------|------------------------|----------------------------|------------------|--------------------------|
| 1 car off the road on working days | 40     | 10000   | 17.6           | 568.18                      | 2.325                  | 1321                       | 51.66            | 29352                    |

\* Data sourced from the study by UNDP-GEF’s low carbon toolkit

### Medium distances – consider sharing

- Travel by public transport whenever possible. Buses, metros or local trains use much less fuel per person than cars and spare you the stress of traffic snarls.
- In case you decide to take your own car, it works better for the pocket and the environment to share the trip. It will not only save money but also bring down per capita carbon dioxide emission.
- Drive sensibly. Aggressive driving (speeding, rapid acceleration and braking) wastes gasoline.
- Don’t travel in a freezer! Air conditioning uses large amounts of fuel and adds to the carbon footprint of commuting. If the AC is absolutely necessary, use it only to achieve neutral temperatures (24-25 degrees). Lower temperatures use significantly more energy.

The use of alternative fuels has been promoted in India for energy security and emission reduction. Delhi and Mumbai have more than 100,000 commercial vehicles running on CNG fuel. India is planning to introduce Biodiesel and Ethanol Gasoline blends in a phased manner. These may not be as sustainable as originally thought, since they divert land and water usage from food and agriculture to transportation. The Indian auto industry is working with the authorities to facilitate the introduction of these alternative fuels. India has also set up a task force for preparing the Hydrogen road map.



# COSMETICS

The earliest records of cosmetic substances and their application dates back to 2500 – 1550 B.C. There is evidence of highly advanced ideas of self beautification and a large array of cosmetic usage in ancient India. Many of these practices were subtly interwoven with the seasons and the normal rituals of life. Today, the market for cosmetics and personal hygiene products is booming. Skin creams, lotions, peeling creams, fragrances, facial masks and hair conditioners promise to make us look younger and more attractive and to keep our skin smooth and healthy.

Cosmetic products perform a number of different functions. We use them to clean, protect and groom our skin, hair and teeth and to change how they look and smell. Yet cosmetics have a downside as well. They can cause skin irritation and some ingredients are harmful for the user’s health and pollute the environment. Think carefully about the purpose and the quantities of cosmetics you use. When it comes to decorative cosmetics such as lipstick, mascara and eye shadow, less is often more.

## What are your cosmetics made of?

### Hidden information and threats

Roughly 8,000 natural and synthetic substances are used in the production of cosmetics today. Some of our everyday products include ingredients that are allergenic and harmful for us and the environment. Check labels to avoid the following chemicals in your products before you pick up your favorite shampoo the next time.

#### Triclosan

Often found in toothpaste, has been linked to hormone disruption and the emergence of bacteria resistant to antibiotics and antibacterial products. Along with its negative health effects, triclosan also impacts the environment, ending up in lakes, rivers and other water sources, where it is toxic to aquatic life.

#### Synthetic Musk

Several studies suggest some of these compounds may disrupt hormone systems or trigger skin sensitization when exposed to UV light. Synthetic musks identified in fragrances have been found in the cord blood of newborn babies as well as in blood, breast milk and body fat.

#### Formaldehyde

These chemicals help prevent bacteria from growing in water-based products, but can be absorbed through the skin and have been linked to both skin sensitivity and cancer.

#### 1,4-dioxane

Very few, if any, cosmetics or personal care products list 1,4-dioxane as an ingredient. Environmental Working Group’s analysis suggests that 97 percent of hair relaxers, 57 percent of baby soaps and 22 percent of all products in Skin Deep may be contaminated with 1,4-dioxane.

#### Hydroquinone

It’s one of the worst ingredients used in personal care products and may disproportionately affect women of color, who are more likely to be exposed to hydroquinone if they use skin lightening products.

#### Lead and Other Heavy Metals

A number of metals, including lead, arsenic, mercury, aluminum, zinc, chromium and iron are found in cosmetics ranging from lipstick to whitening toothpaste, eyeliner, nail color and more.

### ANIMAL TESTING

A very important measure of going green is to make sure all of your cosmetics or beauty products are not tested on animals. Animal testing has been found to be unnecessary for the production of beauty products and is thus preventable cruelty against animals.





### India trivia

Homemade cosmetics, the old-fashioned beauty recipes your granny used to make, are indeed all natural and chemical free. Ancient Indian cosmetic materials were made from plant products such as fruits, vegetable oils, fats and herbal pastes. Recipes for hair and skin products exist in each family, community or region. Most Indian women have continued the use of traditional beauty aides as they are fresh and less expensive and only contain a few ingredients. Popular traditional ingredients include Ritha, Shikakai, and Amla. As an Indian consumer you also have the benefit of several Ayurvedic remedies now available in the market.

### Picking the right packaging

Be selective in your choice of packaging sizes. Buy only those cosmetic products you are certain to use up before they expire. The size of a packaging unit also affects the amount of waste generated by consumers of personal hygiene and grooming products. Several small packages create more waste than a single large unit.

## TOYS



Toys are an important part in every family's life. On birthdays and big holidays every toddler and youngster gets very excited when opening their gift boxes filled with toys. These get carried around and often have to accompany the child everywhere it goes. A product that is so close to your child has to be chosen wisely. When buying children's toys take an extra moment to think about these points:

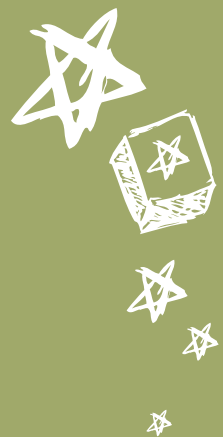
- Plastic or wooden toys? When opting for wooden toys make sure they are made of wood originating from sustainable forests. With plastic ones, look for the sign "PVC-free" or "phthalate-free".
- Wooden toys should be painted with non toxic paint, preferably vegetable dyes
- Toys made out of bamboo are the most sustainable choice, as it grows back in the course of a few years only
- Were the toys produced under fair working conditions? No child labour should be involved in the production of the toys you want to give away as a present.
- Toys are supposed to last. Robustness and durability should be important criteria. Hand-crafted toys by Indian artisans are becoming ever more popular because of their improved quality, safety and original design.
- Toys must be free from harmful substances – if you don't like the smell of it, you better leave it in the shop.

### Down To Earth Magazine

'Don't Touch' Issue Jan 31st 2010  
[www.downtoearth.org](http://www.downtoearth.org)

### Recycling toys

In addition, the pile of toys in everybody's home keeps getting higher and higher with no end in sight. If you want to reduce this pile of perfectly fine but dust collecting toys, imagine the smile on other children's faces on receiving your donated toys. Get your own children involved in sorting out the toys they don't play with anymore and decide which good cause they should go to together. This could be a child hospital or the neighbourhood kindergarten. Toy swap parties can be fun, too!



# RARE PURCHASES

03





# APPLIANCES AND GADGETS

In the twenty-first century, there is a growing realization that the world’s energy resources will need to be changed radically if they are to supply our energy needs sustainably on a long-term basis.

The home may be the best place to think about when making sustainable choices. At home, the biggest impact we have on the environment is through our use of energy and water. Many of the actions at your home are small, simple everyday choices – such as setting your computer to sleep mode, air-drying your laundry, or installing compact fluorescent light bulbs. When you add them all up, you realize you’re making a real difference. Additionally, there are some long-term decisions to keep in mind for when you want to upgrade your appliances or move to a new home.

## QUOTE



“Be the change you want to see in the world.”

**Mahatma Gandhi**





### Save energy with these few simple steps

- Shut down equipment properly. Disconnect equipment from the power source when it is not in use.
- Keep refrigerators and freezers out of direct sunlight, and allow at least 5 centimeters all around (or as recommended by the manufacturer) to allow heat to escape from the compressor and condensing coil.
- Clean your refrigerator's coils (back) and air intake grill (below the doors) every 3 months.
- Don't let freezers build up more than 6 mm of frost. Defrost regularly to keep freezers working their best.
- Allow hot foods to cool before putting them in the refrigerator.
- Use kitchen, bath, and other ventilating fans wisely. Turn fans off as soon as they have done the job.
- Plant trees or shrubs to shade air-conditioning units but not to block the airflow. A unit operating in the shade uses as much as 10% less electricity than the same one operating in the sun.
- Turn off the TV when no one is watching it. The same goes for computers, radios and stereos - if no one using it. Turn off all the appliances at the surge protector/control strip.
- Wasting water wastes electricity. Why? Because the highest amount of electricity in most cities is spent on supplying water and its purification!

### How to tame energy consumption at home

#### 1. Buy durable products

Sustainable products should have a long service life. They should be made to last, i.e. should be of good quality, and they should not burden you with high maintenance costs (e.g. energy consumption). Sustainable products do not contain materials which pose hazards to the environment, and they are produced under acceptable social conditions. When it comes to rare purchases, research – even though it may take time and effort – usually pays off. Check with consumer report magazines produced by Consumer Voice and CERC Insight.

#### 2. Renewable energy

Use renewable energy devices such as solar water heaters, solar cookers, solar lanterns, solar home systems, and other devices. Conventional water heaters use a lot of energy and pollute the environment. Solar water heater systems can work in any climate and will help save water heating costs by reducing the amount of gas and electricity needed to heat water for bathing and routine house hold jobs.

#### 3. Buy energy conserving products

Adopt energy conservation devices, for example LEDs (light-emitting diodes) or CFLs (compact fluorescent lamps) instead of incandescent bulbs. Replace your tube-light with the thin, energy-efficient ones and your old tube light choke with an electronic ballast. Energy-efficient electrical appliances such as fans, refrigerators, air conditioners, coolers, room heaters and water pumps among others will win you over in the long run.

#### 4. Buy energy efficient products

Refrigerators and washing machines are loyal, long-time household companions that save us a great deal of work. No one wants to do without these useful helpers. But it is important to keep an eye on how much energy your appliances consume. By doing so, you help protect the climate and save money as well.

With effect from January 2010, the Bureau of Energy Efficiency (BEE) has made it mandatory to label certain products including air-conditioners according to their star ratings. The ratings begin at 1 star and rise up to 5 stars where the level of energy consumption is the least. Prices tend to be higher for the appliances with more stars but with those appliances the level of energy consumption is lower and you will recover the price difference within just a few years. Other star ratings labeled appliances available in the markets are refrigerators, tubular fluorescent lamps, induction motors, pump sets, ceiling fans, LPG, electric geysers and colour TVs.

#### MAJOR HOUSEHOLD APPLIANCES



Reducing the energy consumption of major household appliances is especially worthwhile. Washing machines, ovens, dishwashers, dryers, refrigerators, freezers and air-conditioning units consume over two-thirds of the electricity required to run your household. Refrigerators and freezers alone account for 29% of the total power consumption.

Buy BEE 5 star rated products

Refrigerators (Frost-free refrigerators)

| Appliance                       | Annual electric-ity consumption (kWh) | Emission factor (kg CO2/kWh) | Annual CO2 emission (kg) | Electricity cost (Rs/kWh) | Annual cost (Rs) |
|---------------------------------|---------------------------------------|------------------------------|--------------------------|---------------------------|------------------|
| BEE 2 star rated 235 lts fridge | 706                                   | 0.82                         | 578.92                   | 4                         | 2824             |
| BEE 5 star rated 240 lts fridge | 385                                   | 0.82                         | 315.70                   | 4                         | 1540             |
| Savings                         |                                       |                              | <b>263.22</b>            |                           | <b>1284</b>      |



Air conditioners (1.5 tons split ACs)

| Appliance           | Wattage (W) | Estimated Daily Use (hrs) | Annual Electricity Consumption (kWh) | Emission Factor (kg CO2/kWh) | Annual CO2 Emission (kg) | Electricity Cost (Rs/ kWh) | Annual Cost (Rs) |
|---------------------|-------------|---------------------------|--------------------------------------|------------------------------|--------------------------|----------------------------|------------------|
| BEE 2 star rated AC | 1970        | 6                         | 2127.6                               | 0.82                         | 1744.6                   | 4                          | 8510.4           |
| BEE 5 star rated AC | 1650        | 6                         | 1782.0                               | 0.82                         | 1461.2                   | 4                          | 7128.0           |
| Savings             |             |                           |                                      |                              | <b>283.4</b>             |                            | <b>1382.4</b>    |

\* Data sourced from the study by UNDP-GEF’s low carbon toolkit







### Understanding disposal

E-waste is old computers, TVs, refrigerators, radios – basically any electrical appliance that has reached its end-of-life. Improper recycling and disposal of e-waste can result in dangerous health and environmental hazards from toxic chemicals and persistent pollutants such as lead, mercury, PVCs and softeners. Keep in mind that electronic appliances that have outlived their usefulness do not belong in the household dustbin.

The general rule to keep in mind is that the longer a mobile phone or other electronic device is used, the better. Don't go along with every passing technology trend. Consider the possibility of having your computer repaired or upgraded or selling equipment you no longer need via the internet. Pass on devices that are still working to schools or charitable organisations.

In comparison to corporate users, individual household consumers generate small quantities of e-waste every year, but the total volume is huge given the sheer size of the market. The NGO ToxicsLink estimates that individual households account for 22% of junk computers in India. Currently, these are exchanged for new appliances, or sold to door-to-door scrap collectors.

Formal e-waste recyclers are in an emerging stage, the first ones being established in Bangalore. Currently, the collection, dismantling and recovery are done entirely by a well established network in the informal sector. Even though the sector creates substantial value, especially by collecting and repairing disused equipment, some recovery processes employed are extremely dangerous.

### QUOTE



“There must be a reason why some people can afford to live well. They must have worked for it. I only feel angry when I see waste. When I see people throwing away things that we could use.”

**Mother Teresa**



# TRAVEL

Although the Indian per capita emission of CO2 is still comparably low internationally with 1.2 metric tons per year in 2009, due to the large population, the country is already among the top 5 emitters worldwide. In addition, CO2 emissions in India are expected to grow massively in the coming years. Transport, in addition to industry and the energy sector is one of the major contributors to these emissions. The number of car registrations in India is increasing by more than one lakh every month and flights on national carriers soared by 22 per cent in the first four months of 2010 compared to the year before.

Historically, in India, it has been low-key religious pilgrimages and trips to holy places rather than business trips or vacations that constituted travel. With economic growth and advancement in the sector of transportation, the negative impact of travelling on ecosystems, health, biodiversity and natural resources through transport related emissions has become obvious. In order to deal with this immediate problem, ways of ‘sustainable travel’ have to be found meaning possibilities of travelling that are socially, economically and environmentally feasible in today’s fast paced life.

## How to reduce your carbon foot print as a traveler

### 1. Consider options

Holiday travel does have a downside as well - the greenhouse gases that are emitted while traveling to and from your destination. These gases are known to accelerate climate change. Therefore, the environmental impact of travel and the climate footprint we leave behind depend primarily on the means of transportation we choose. Long-distance air travel releases tremendous amounts of CO2 into the atmosphere. So why not consider traveling by rail instead of driving or flying on long-distance trips?



### 2. Fair and Sustainable Tourism Criteria

On the occasion of World Tourism Day in 2010, all of India’s leading hotel chains and associations took a pledge to support Fair and Sustainable Tourism. The Indian Sustainable Tourism Criteria are based on the Global Sustainable Tourism Criteria, developed by the United Nations Environment Programme in collaboration with the World Tourism Council and other international tourism bodies.

The set of criteria for India encompasses all aspects of sustainable tourism – starting from the way that hotels are designed and built to the facilities available at hotels and are mindful not only of the environment, but of the heritage and traditions of local communities. The criteria are applicable not merely to so-called “eco-tourism” in jungles, hills and the sea-side; they are equally applicable to hotels in highly urban areas.

It is expected that by 2011, the pledge taken by hotels will be converted into a certification programme, similar to the star ratings. Be sure to look out for hotels which are thus certified – you’ll find them great places for a vacation and you’ll help in preserving India’s great heritage, culture and environment.





**3. Research well and experience eco tourism**

Ecological (eco) tourism seeks to minimize the negative impact of tourism, provide financial means for ecological and cultural conservation and empower local people. Eco tourism in India is still at a very emerging stage, but there are conscious efforts to save the fragile ecosystems and heritage of indigenous people. A number of tour operators and eco-destinations all over the country offer a more sustainable way of travelling and spending your vacation. Accommodation is provided in tents, tree-houses or lodges built from local and sustainable materials. Eco-destinations use renewable energy sources like solar energy and hydropower to run the resort. They strive to reduce the water consumption and pollution by harvesting rain water and minimizing the use of chemicals. They offer food prepared from local fruits and vegetables. They consciously reduce waste, for example by offering filtered drinking water instead of bottled water.

**4. Be good to your destination**

Make an effort to act responsibly toward the people who live wherever you spend your holidays. Respect the customs and moral standards that prevail in other countries. Take care not to affect the bio-diversity and heritage of your destination. Travel is more fun when you immerse yourself in the culture of your host country. And be sure to pay “fairly” for the services you receive.

**Labels and standards for eco-tourism:**

**Travel Wisely**, is one of India’s ecologically responsible tour organizers.

**The International Centre for Responsible Tourism - India (ICRT India)** is part of a growing network of International Centres on Responsible Tourism. The centres share a common objective, to work with the private sector, government and local communities to “take responsibility for achieving sustainable tourism, and to create better places for people to live in and for people to visit.” Established in 2006 as a not for profit organisation based in Bangalore, India, ICRT India provides policy advice, research and consultation on developing Responsible Tourism in India.

EXEMPLARY TRADITION



Religious pilgrimages have taken place for hundreds of years without causing any negative environmental, cultural and social impacts associated with travel nowadays. The actual pilgrimage distance is mostly covered by foot, they are beneficial to local communities as local resources are used for food and travel, people carry their own baggage, killing animals or taking from nature is taboo. Take this tradition as an example for your own holiday – be it religious or not.

MAJOR PURCHASES 04







## GREEN BUILDINGS

As consumers we frequently have to make choices and decisions which require huge financial investments and at the same time have enormous environmental and social implications. This definitely goes for the houses we live in. Once one owns or rents a house one sets about adjusting it to one's needs and fancies. Most of us are aware of the significance of 'Vaastu' in the home environment, but since the issues of location and direction are often not in one's control, all one can do is to make adjustments in the interiors. However, urban housing has lots of potential for addressing some important concerns. Vaastu or the green options available these days basically have the same approach, taking into consideration the basic comfort, quality and ecologically workable choices in building, renovating or maintaining a house.

### IN THE PIPELINE: BUILDING GREEN

Green buildings increase efficiency by using resources like energy, water and materials conservatively, while reducing building impacts on human health and the environment during the building's lifecycle. This is possible through planned design, construction, operation, maintenance and recycling resources. Sometimes, but not always, it may cost a little more to design and construct a green building. However, it is also a proven fact that it costs less to operate a green building that has tremendous environmental benefits and provides a better place for the families living in it. Consequently, the challenge of a green building is to achieve all of its benefits at an affordable cost.

When it comes to building an eco-friendly home or to completing a “green” remodeling project, you should pay close attention to the following aspects:

Building materials

In recent times, because of the large scale growth of the construction industry, the exploitation of natural resources has gone up significantly. We therefore need to find suitable material that not only addresses the needs of the construction industry but environmental concerns as well. Using environment-friendly building materials contributes towards a sustainable home. Environment-friendly material is made from recycled material that uses only renewable energy in its extraction, production and transport, and can be reclaimed and recycled.

Going Green with Wood Alternatives

When searching for wood products to use for your home, you should keep these things in mind.

Purchasing lumber that originates from sustainable forests is important because sustainable forestry focuses on maintaining the health and well-being of the ecosystem. If you want to install hardwood floors, you might want to consider purchasing flooring that was made from recycled or reclaimed woods.

Bamboo

A popular option for those who are trying to build a green home is to use bamboo as an alternative to hardwood. Since bamboo grows by as much as one foot every day, it can be harvested and then re-grown quickly and easily.

PAINTS & OTHER  
HAZARDOUS LIQUIDS



Many paint products, paint removers and thinners as well as adhesives contain solvents that are dangerous to humans, animals and the environment. Purchase only what you truly need and try to use one product for as many projects as possible. Use water-based inks, paints, adhesives and non-toxic glues.

FINANCING  
GREEN BUILDINGS



Consumers can now get government support in form of subsidies or loans for financing some aspects of building or putting in environment friendly technologies into the already constructed premises. Specific green housing loans exist for customers who buy properties in green projects which reduce carbon emissions and promote renewable energy. The State Bank of India offers home loans to support environment friendly rated residential projects by offering concessions including reduced margin and lower interest rates.

TERI and Fraunhofer Institute in Germany are jointly developing an assessment tool for green residential buildings. The National Housing Bank is likely to offer loans with privileged conditions for green residential building projects in cooperation with the German KfW Development Bank from 2011 onwards.

How to go sustainable

Double Glazed Windows

Double glazed windows with air gaps can act as good insulation. The insulating air gap lowers the heat gain of the building. It should be used for air-conditioned spaces. The BEE (Bureau of Energy Efficiency) has recommended specifications for glazing in air-conditioned spaces in the Energy Conservation Building Code 2007. Most homes usually have single clear glass. Double glazed windows, with sun control (coatings, shading etc.), should preferably replace single glazed windows to reduce energy used for air-conditioning.

Passive Heating

In cold climatic zones, heat flows away from buildings through their external envelopes and due to air exchange. In such regions, passive heating measures are adopted to reduce the demand for conventional heating. If your house faces south, construct sun-spaces or the traditional courtyards that are an essential part of Indian homes, adjacent to south-facing walls. A sun-space can be constructed by using double glazing.

Landscaping

Landscaping provides a buffer against heat, sun, noise, traffic, and airflow. Trees such as amaltas, champas and similar varieties provide shade in the summer and sunlight in the winter when their leaves fall. So planting such trees to the west and south-west of a building is a natural solar passive strategy. Evergreen trees provide shade and wind control round the year. They are best placed to the north and north-west of a building. Packed gravel in parking lots and driveways instead of concrete reduces rainwater run-off and replenishes ground water resources.

EVAPORATIVE COOLING



When water stored in a water body evaporates into the surrounding air, it lowers the temperature of the surrounding. This phenomenon is known as evaporative cooling. The presence of a water body such as a pond, lake or sea near the building or even a fountain in the courtyard can provide the cooling effect. Vaastu also recommends the use of indoor and outdoor fountains within built spaces.



Roof Treatment

Roofs are exposed to maximum solar radiation. So it is important that the roof of your house is protected to minimize the amount of sunrays. Some simple roof treatments can be applied to existing homes in order to reduce summer heat gain:

- White washing the roof before the onset of the summer.
- Spraying water on the roof. Sprinkling water at regular intervals can reduce heat gain through the roof.
- Using shining and reflecting material for the rooftop. Broken white china tiles are an excellent and cheap way of reflecting heat from the roof.

Labels and standards for greening your house

The Forest Stewardship Council (FSC) is the international standard for forest products that are manufactured and extracted in a sustainable method including timber, all kinds of paper products or wooden products like coat hangers. FSC prohibits the conversion of natural forests and the use of highly hazardous pesticides. It strives to respect the right of indigenous peoples around the world and controls each certified operation at least once a year.



VEHICLES

Most people today can hardly imagine life without a car. Added to this is the lack of adequate infrastructure and unattractive, over-crowded public transportation options in many places. As a result it is quite difficult to get along without a car in many parts of the country.

What is a good option?

An important aspect of climate-conscious driving is the choice of the right car. Total CO2 emissions from passenger vehicles could be reduced by 40% by 2020 if everyone switched to more sustainable models. That equates to a savings of 40 million tonnes of CO2 every year. Look for low fuel consumption when buying your next car.

How to do it yourself and how to do it right

CO2 emissions could be reduced by roughly 5 million tonnes per year if people adopted economical, climate-conscious driving habits. Reassess your own driving style and use the slogan “drive with foresight” as your guide. With the aid of a few simple tricks you can reduce fuel consumption, drive more safely and save money at the same time.

- Leave the car at home as often as possible and use other means of transportation.
- Taking a taxi from time to time or using a ride-sharing service for longer trips is economical and environmentally friendly.
- Be gentle with your accelerator and turn the engine off at stoplights- the norm is 15 seconds.
- Quick gear-shifting and driving at low rpm in city traffic saves fuel and protects both your engine and the environment.
- Hauling luggage and other loads in the boot increases fuel consumption.

TYRES



Many drivers are not aware that tyres play an important role in fuel consumption. You should check your tyre pressure regularly. When pressure is too low, roll-resistance increases and fuel consumption rises accordingly.

Sustainability aspects to keep in mind while buying a vehicle:

1. Always choose the vehicle with the better fuel economy, even if this means you pay a bit more. Apart from saving on fuel, you will also lessen the yearly operation cost of your vehicle. Better fuel economy translates to less natural resource use and therefore less pollution and less CO2 emissions.
2. If possible, choose vehicles with emission control technology or low emission profiles. Emission control technology reduces harmful gaseous pollutants from the tail-pipe. It should be borne in mind that emission control technology often needs clean fuel of a certain standard to continue operating.
3. Whenever available, use clean fuels including unleaded gasoline and low sulphur diesel.

## BUYING RESPONSIBLY AT FESTIVALS

05







### Festivities

India, the land of cultures and festivals celebrates many festivals and pujas. These lead to a large amount of emission and waste. If planned properly it can be done in a much more efficient manner than leaving a dump of polystyrene throw-away utensils.

### SAFE AND SMART AT FESTIVALS

#### What are my options?

- Plan in advance and note down the options. Last minute purchases always make one pick up the easy available option.
- Try to plan out the occasion and think of sustainable choices like clay idols instead of plaster of paris idols.
- Instead of using electric lights, experience the natural light of earthen lamps or diyas.
- Traditional festivals are a good time to give handmade presents or handicraft items.
- Try being creative with the packaging of your presents wrapping them in cloth for example instead of using too much plastic wrappings.

#### Diwali

Crackers made in most parts of India involve child labour. Give your support by saying no to such products - or buy less. How about planting tree to make up for your carbon footprint caused by all those fire crackers?

#### Holi - playing the natural way

Scientific studies revealed that industrial colour powders can be responsible for asthma, temporary blindness and allergies affecting skin and eyes as they are toxic to a great extent. So go organic! Buy organic holi colors or make them at home with flowers and other organic substances like beetroot, turmeric, sandalwood and henna powder etc.

### Durga Puja and Ganesh Chaturthi

In recent years efforts have been made to work against the trend of commercializing puja idols. Instead of making them even bigger, better and more colorful with every year, a sustainable way of celebrating a Durga Puja or Ganesh Puja is by immersing eco-friendly idols into the water. It is the plaster of paris, plastic and cement used for sculpturing the idols and the chemically laden paints that are extremely dangerous for the water body as well as our drinking water. Alternatively, idols made out of unburnt clay and painted with vegetable-based substances are biodegradable and will not harm the natural balance of the rivers.

#### Best practice example: Kolkatta

The government of West Bengal stands out by promoting eco-friendly techniques and giving out non-toxic paints to the local idol craftsmen, thereby investing in a clean Durga Puja.

### INDIAN SWEETS

One of the most prominent features of Indian culture and hospitality are sweets. On all important festivals in India, sweets continue to be the most favourite gift to convey greetings.

The most prominent features of Indian sweets are the absence of stabilizers, emulsifiers, chemical preservatives and the like. Sweets are mostly homemade which makes them more sustainable. When buying sweets, avoid coloured sweets and those with 'silver' foil, as the source might be unsafe.



# **EXPLORING THE 3R'S** 06

## **CLOSING THE CYCLE OF RESPONSIBLE CONSUMPTION**







## WASTE

Waste has significant consequences, especially on health, because waste becomes a concentrated storage area of all that is undesirable. It can contain toxic compounds and can produce greenhouse gases like methane and other toxic gases like dioxins when burnt. Land dumps leak the toxicity into surface and groundwater. Industrial sewage water often used as irrigation water for urban farming contaminates vegetables and other foods with heavy metals.

Waste also has a social aspect. Not only those who earn more generate more waste, also landfills are sited on the cheapest land available, and so is the location of recycling and waste treatment facilities. The poor generate the least amount of waste but feel its impacts the most, whether as people who live next to it or make a living out of it. Studies have shown a high rate of respiratory diseases and other health hazards related to chemicals affecting especially those people who live near waste dumping sites. Several hundred thousand waste pickers live off the discards in our cities, often because this is the only job they can find.

## QUOTE



“The greed of gain has no time or limit to its capaciousness. Its one object is to produce and consume. It has pity neither for beautiful nature nor for living human beings. It is ruthlessly ready without a moment’s hesitation to crush beauty and life out of them, molding them into money.”

**Rabindranath Tagore**

The 3 R's:  
Reduce, Reuse, Recycle

REDUCE

What you can do to reduce your waste

- Buy in large quantities to reduce the amount of packaging you bring home
- Buy only what you will use. If buying in bulk packages, make reciprocal sharing arrangements with neighbours, relatives and friends. It will save money and reduce waste for everyone involved.
- Use online bill-payments and combine it with paperless billing. This way time and paper is saved, mailbox clutter is reduced and you save the cost of mailing with each bill paid.
- Also, think before you print. Despite of the digital possibilities, modern households and offices still produce a lot of printed paper. Reduce your printing or at least print on both sides of the paper.
- Avoid bottled water. Not only is bottled water wasteful (about 80% of these petroleum-derived plastic bottles are landfills material), it is more expensive than tap water and if you are concerned about safety, install a filter. Cheap candle filters can be very effective, unless you need to treat hard or saline-water.
- Opt for rechargeable batteries instead of single use batteries. Rechargeable batteries can be recharged a few hundred times and reduce the amount of toxic waste. Once recommended for the trash, regular batteries are increasingly being collected. Not that they are actually recycled - often they are simply put in a more expensive landfill. Therefore avoid buying these.
- Use your own reusable canvas bag or backpack at the store and don't accept plastic bags from the shopkeeper. Also, ask delivery services for food not to include plastic plates, cutlery and napkins.

REUSE

Most of us pass on left-over food etc. to the families who help around the house or we convert old clothes into re-usable formats. Here are some more ideas on how to reuse stuff that would otherwise be waste:

- Plastic bags can be used various times, ultimately as trash bags
- Printing paper and envelopes can be used as scratch paper
- Newspaper and cardboard make useful packing material when moving house or to store items
- Clean glass jars from jam or pickles to reuse as storage containers
- Make new things out of old things, like a candle holder from a glass bottle
- Donate old clothes, books and magazines.

RECYCLE

Indian municipal solid waste contains 20% of recyclables out of which 7-15% is actually recycled in the country. To some extent most Indian households already recycle part of their waste by collecting paper and selling it to the kabari wallah who takes it further for recycling. Plastic and glass bottles are reused in the form of refilling and reselling the item, from which much of the trade of faked products in India emerges. Informal e-waste recycling is most harmful to workers and environment.



**Recyclable product symbol:** This symbol shows the simple Mobius loop used extensively all over the globe. There are two variations of this symbol. The outline form and the filled form. Both convey the same message that the product can be recycled.

**Recycled product symbol:** These are marked on products which are made of recycled materials. Not all recycled products are made of 100% recycled materials. A percentage inside the Mobius loop indicates the percentage of recycled materials used in manufacturing the product.







## DISCARD WISELY

- Paper: The key to recycling is collecting large quantities of clean, well-sorted, uncontaminated and dry paper. Paper that can't be recycled as normal "mixed paper" includes food contaminated paper, waxed paper, oil soaked paper, sanitary products or tissues, thermal fax paper, stickers and plastic laminated paper such as fast food wrappers, juice boxes, and pet food bags. Paper with any sort of contamination or plastic layers can't be recycled.
- Set up a compost bin for your food and garden waste. Composting vegetable trimmings, banana peels, lawn clippings and the like will reduce what goes to the landfill and provide organic fertilizer for your garden.
- Glass, steel (or "tin") and aluminum are easy to recognize and recycle. Glass bottles must not be mixed with other types of glass such as windows, light bulbs, mirrors, glass tableware, Pyrex or auto glass. Scrap aluminum is accepted in many places.
- If you are throwing away an old refrigerator, heat pump or air conditioner be sure that the CFC's are drained out and recycled first. This can be done with a refrigerant recovery system. Most of the older refrigeration equipment contains freon, a chemical know as a Chlorinated Fluorocarbon or "CFC" in short. Each molecule of a CFC can destroy over 100,000 molecules of the earth's protective ozone coating. Before having your car's air conditioner serviced, ask what the shop does with the freon. Never allow a leaking refrigeration system to be recharged.
- Favor products with a high recycled content, even if they cost a little more.

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## **sustainable shopping basket**

### **a lifestyle & shopping guide**

This guide aims at compiling basic shopping tips concerning sustainable consumption in India. It raises questions and puts forth realistic alternatives on sustainability in a society where consumer behavior is in rapid transition. Although sustainable consumption is still a new concept to everyday life, before long India will have to face the idea of embracing more sustainable options. This guide is a first step in that direction.

