

Project II

SUSTAINABLE IDEAS FROM INDIA

Vallabh Munshi
08625003

Guide
Prof. Ravi Poovaiah

IDC
IIT Bombay

Sustainable Development

Definition

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The Spectrum of Sustainability

A mind map was drawn for the spontaneous generation of a wide spectrum of ideas as possible.

Mind-map

Pollution
Toxicity
Health hazard
Pesticides
Oil spills
Chemicals
Ozone depletion
Detergents

Paper consumption
Felling trees
Habitat destruction
Extinction

Carbon footprint
Environment
Ecosystem
Ecology
Conservation
Defending Oceans
Protecting forests

Energy neutral
Energy efficiency
CFL bulbs
Carbon neutral
Resource Efficiency

Consumption
Reduce
Reuse
Recycle

Alternate technology
Renewable Energy
Wind
Solar
Hydel

Waste
Non-biodegradable
Plastics
Polymers
Polythene

Greenhouse gases
Carbon emissions
Fossil fuels
Global Warming
Melting Icecaps

Sustainable Development

Cyclic
Organic
Indian culture &
Tradition
Go-local
Eat local
Vermicompost

Eco-friendly
Green
Biodegradable
Safe

Ethanol
Blodiesel
Propane

Car-pooling
Electric car
Public Transport
Muscle Power
Cycle
Walk

Focus area



Nature and resources are worshipped, sensitive people, we naturally reduce reuse and recycle waste

Crisis

Convenience over Environment

Nobody challenges our way of life. No consumers are demanding better versions in terms of environmental performance. Most people simply haven't thought about it, especially when the price and the user performance is acceptable. People are choosing convenience over environment.

Crisis

Where are the alternatives?

There are inventions and discoveries happening everyday, there are alternatives which are available, it is just that everybody does not know everything. Options should be out in the open, alternatives should be available. There should be a platform to see all the alternatives.

Crisis

Relative Information

Facts should be read and compared with each other. We need to share our ideas with everyone and select the ones best suited for us. Relative information is necessary so that there are options to make choices.

Project

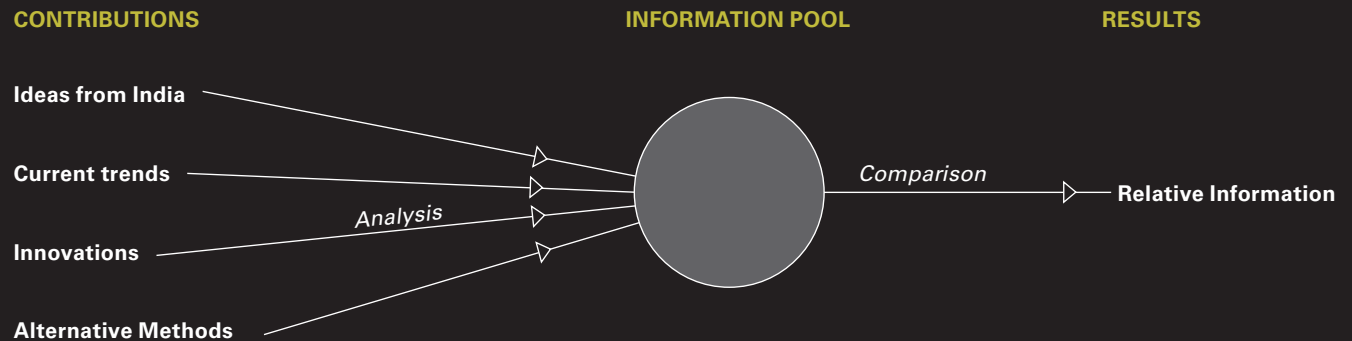
'An Online Forum For Sustainable Ideas From India'

Objectives

1. To resurface sustainable Indian thoughts.
2. To evaluate products and ideas with respect to sustainability.
3. To show comparative information so that people can make informed choices.
4. To make a forum which will remain active due to discussions and continuous contributions.
5. To make a platform where people can network, advice each other and work in collaboration.

Project Abstract

1. Receive Contributions.
2. Analyse them.
3. Create an information pool.
4. Provide solutions and relative information.
5. Discuss them and keep the information growing.



Reference

Trehugger



Browse casually,
Search for solutions,
Debate,
Meet experts, and take opinions

Reference

Facebook



facebook Home Profile Friends Inbox Vallabh Munshi Settings Logout

Global Warming - A Real Climate Crisis [Join](#)

Wall Info Photos Discussions

Dusan Oravec <http://www.youtube.com/watch?v=MnRP2OUVhJ4>
October 27 at 8:06pm · Report

GoGreen Hoang Dr. Stephen Schneider... is speaking at the "Humanity's Leap to The Golden Era: Washington D.C. Climate Change Conference. "FREE" www.wadccconference.com. Are you coming?
October 25 at 1:34pm · Report

GoGreen Hoang On November 8th, at the Grand Hyatt Hotel, international speakers will share new data on climate change, the current global food and water crises, the cause of global pandemics and innovative solutions.
The Speakers include:
Dr. Stephen Schneider, Team member of the United Nations IPCC - Nobel Prize Winner 2007
Maneka Ganu... [Read More](#) ·
October 24 at 11:17am · Report

Tom Keeler While I will happily subscribe to the new federal health plan when it passes, I would never choose Dr. Paul to be my attending. Any medical professional too underinformed to "believe in" the biological fact of evolution is not competent to perform surgery, let alone all his other nutjob ideas, like isolationism, protic... [Read More](#) ·
August 6 at 7:57pm · Report

Tom Keeler Fortunately, "socialized medicine" (such as in England, where the doctors are state employees and hospitals are federally-run) is NOT part of ANY of

Information
Category:
Common Interest - Politics
Description:
For years upon years the media in our great nation consistently implies that there is significant debate in the scientific community on whether or not global warming does in fact occur. It does occur, and here is what you must realize. Global warming is a natural process. Human development in the last 50-100 years has caused its rate to increase which may become harmful to all life on the planet, including humanity. Some say that the world will correct itself. Of course it will, but can we... (read more)
Privacy Type:
Open: All content is public.

Join groups,
discuss and
network.

Reference

The screenshot shows a Facebook event page for 'In a planet of our own'. The event is hosted by IDC, IIT Bombay and is categorized as 'Education - Study Group'. It is scheduled for Tuesday, November 3, 2009, at 9:00am, with an end time of Saturday, November 7, 2009, at 6:30pm. The location is IDC, IIT Bombay, Main Road, Powai, India. The event description mentions it is a vision of sustainability from across six continents and is organized in partnership with DesignIndia.net. The page also shows a 'Your RSVP' section with options to 'Attending', 'Maybe Attending', or 'Not Attending', and an 'Other Invites' section listing people like Divya Talwar, Atish Boreja, and Pavan Gurjela.

Host events,
invite people
and network.

The screenshot shows a Facebook post by Saurabh Gupta. The post text reads: 'Host: Industrial Design Centre, IIT Bombay. Venue: Infinity Corridor, IIT Bombay. Date: 1st Nov. 2009. Time: 8.00 am to ...Read More'. Below the text is a circular logo with the text 'In a planet of our own' and 'Arc of Infinity'. The post also includes a timestamp 'October 26 at 12:39pm' and a comment from Pradeep Atri: 'Pradeep Atri likes this.' The post is titled 'Sustainability' and the text continues: 'Hey all you intelligent freaks sitting at home and gossiping movies, restaurants and music... CAN YOU GOSSIP ABOUT SUSTAINABILITY. I bet you can't. WHAT DOES SUSTAINABILITY MEAN TO YOU?? WHAT DOES SUSTAINABLE DESIGN MEAN TO YOU??'.

Simply like
ideas, people
need not really
comment.

Reference for analysis

The Total Beauty Of Sustainable Products

By Edwin Datschefski

The 5 design Principles

Cyclic

Products that are made from compostable organic material or from minerals which are continuously recycled in a closed loop.

Solar

Products in manufacture and use consume only renewable energy that is cyclic and safe.

Reference for analysis

Safe

All releases to air, water, space or land are food for other systems.

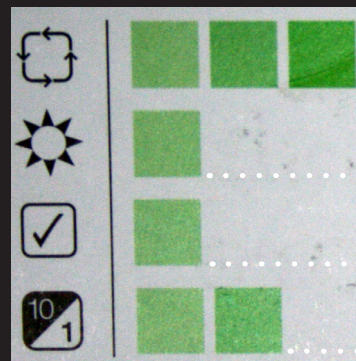
Efficient

Products in manufacture and use require 90 per cent less energy, materials and water than equivalent products did in 1990.

Social

Product manufacture and use supports basic human rights and natural justice.

Reference for analysis



..... Cellulose grown raw material;
reusable and recyclable packaging

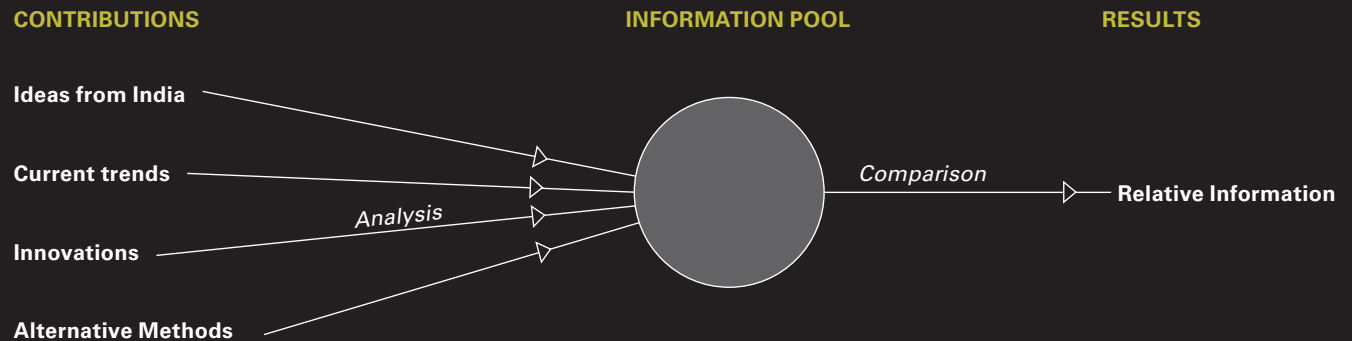
..... Solar grown raw materials

..... Less polluting releases in
manufacture

..... Four times longer life

Project Abstract

1. Receive Contributions.
2. Analyse them.
3. Create an information pool.
4. Provide solutions and relative information.
5. Discuss them and keep the information growing.



Sustainable **Ideas** from India

The solutions are expected to be in a tangible form therefore all the contributions to the forum should be non-subjective so that they can be analysed through the given criteria. The results also need to be evaluated and compared to each other. All the ideas and thoughts have been categorised into two which are:

1. Products; and
2. Practice

Sustainable **Ideas** from India

Products

This category of sustainable ideas covers objects which exist physically in nature or are made by man, for example construction material, food, clothing, products, objects, packaging, gadgets, equipment, tools, natural and man-made resources, etc.

Practice

This category of sustainable ideas covers the way humans live which can also be called as habits, behaviour, activities, rituals, technology, processes, and practices

Sustainable Ideas from India

Requirements Analysis

- Determine the goals
- Determine the user needs

Conceptual Design

- Sketch out a site design and architecture at an abstract level.

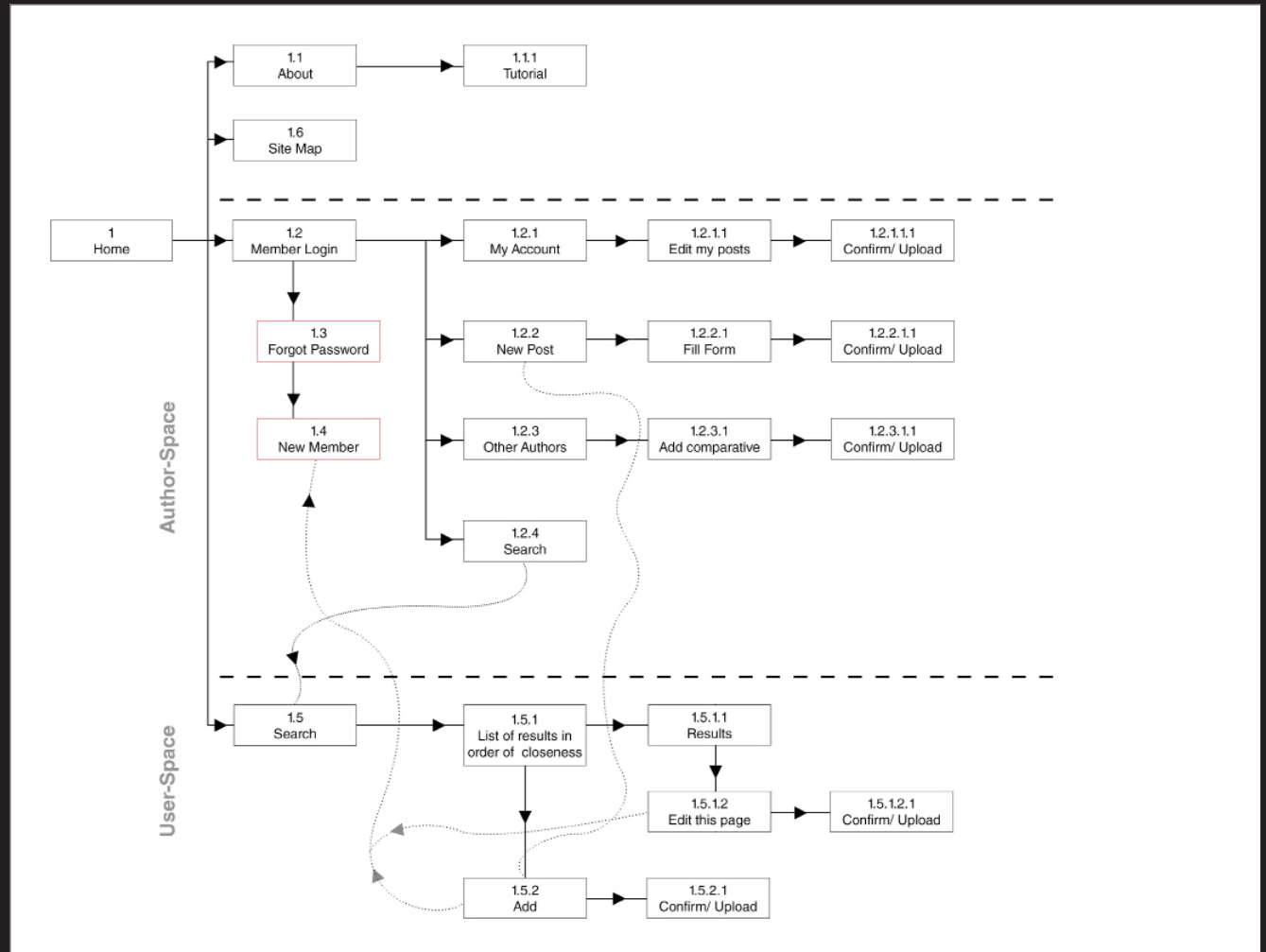
Mockups / Prototypes

- Create visual representations (mockups) or interactive representations (prototypes) of the site.

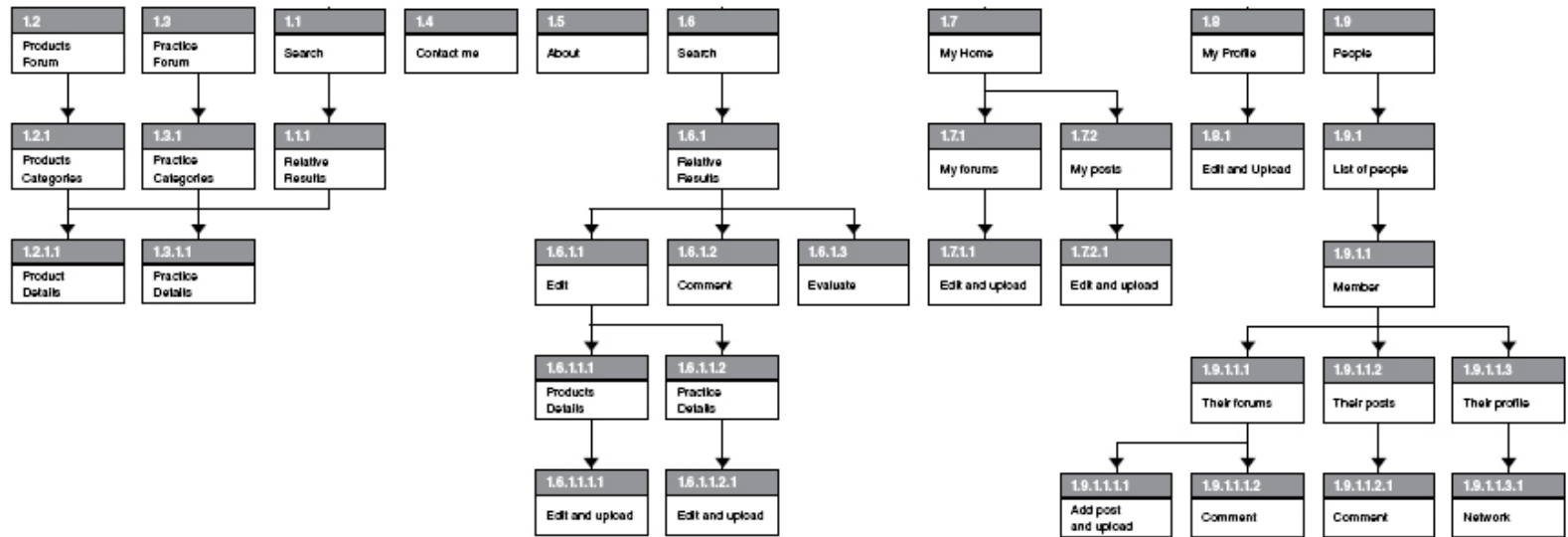
High fidelity Prototype

- A prototype that is quite close to the final product, with lots of detail and functionality.

Conceptual Design



Conceptual Design



Mock Up

Products

INFORMATION POOL FOR SUSTAINABLE IDEAS FROM INDIA

Products (Objects, food, clothing, spaces, materials, gadgets, cars etc.)

Offline comparative chart for authors

Name: _____

Topic: _____

CRITERIA FOR ASSESSMENT:

- 1. Cyclic**
Possibility of the product to be recycled in a loop.
- 2. Manufacturing**
Type and amount of energy required for its production.
- 3. Efficiency**
Number of times or the life span of the product before it dies.

Description	Cyclic	Manufacturing	Efficiency

Mock Up

Practices

INFORMATION POOL FOR SUSTAINABLE IDEAS FROM INDIA

Practice (culture, tradition, habit, behavior, technology, application etc.)

Offline comparative chart for authors

Name: _____

Topic: _____

CRITERIA FOR ASSESSMENT

1. Description of practice
Describe actions, behavior in brief

2. Reason/ logic
Actual intension behind the above
description of practice.

Description of practice	Reason/ logic

Mock Up

Results

Description	Cyclic	Manufacturing	Efficiency
Matka - stores water.	Made from natural materials	Human powered mech. energy can be used.	Natural cooling of water
Use product with multiple usage. Folding chair that generates electricity to light a reading lamp.	Activity generates energy.		Human energy for generating energy.
Banana leaf	Biodegradable	From nature	Excellent containing properties.

- Greywater system	- Water can be reused for all other purposes other than drinking - nutrients & org. matter as fertilizers
- Composting Toilets	- Eliminates a huge % of typical domestic water use.

Description of practice	Reason/ logic
Use smaller plates, Ketoris to eat food.	Less food is wasted.

- Storing old clothes	- Reused by smaller ones - Exchanged for some other stuff
-----------------------	--

High fidelity Prototype
