



**Greenenergy**
A Green Concern!



PROGRESSIVE NESTS



Architect
Pramod Chaugule
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The glimpses of progressive and mature life styles of human beings are visible in each and every endeavor today. A house is no longer a basic necessity but is visualized as a modern amenity. Very fine aspects of modern technology, in the nineteenth century, have now totally transformed human life by becoming ultra modern, in the twentieth century. This has resulted in a total and drastic change in human standard of living and life style. The same human being, who was adapted to a very simple life style, is now undergoing rapid progress, because of the ultra modern amenities.

The significant changes in technology started becoming apparent after the Second World War. The first phase of use of modern technology in construction of houses, was visible after 1850, in Europe, when one and half lac houses were constructed, using novel technology in minimum possible time. As usual, Germany took an initiative, using the latest, modern technology. To a certain extent, these constructions were utilized for the American soldiers, as a result of which, later on the technology was also adapted in America.

The first phase included the concept of "not constructing houses on the spot but constructing many at one spot". The erection was later carried out on the decided spot, leading to saving on time and finances. Later, this was considered as the only basic objective while using modern technology for constructing houses. Initially, this concept was utilized for constructing just one or two floors but later on it started being routinely used for multi storied buildings. In Asian countries, along with housing, this concept was utilized for business purpose and storage. In India, in the initial period of twentieth century, these concepts of modern technology were used in great force, for houses and business. This relieved the builders from the problem of skilled man power required for construction and also changed the scenario of costs and profits, because of the less time required. Gradually, this modern technology started being utilized for human benefits, in minimum possible time, for extremely advanced constructions.

Advanced technologies like BMS and SKADA, can help us create right from the evening, a sea side environment as well as the "reading" mood to "romance" mood! Technology is also being utilized for protecting human beings from natural calamities. Some time back, I got an opportunity to attend an international conference in Tokyo, Japan and was fortunate to see various aspects of advanced technology. We saw an excellent piece of construction in which, the pillars used in the basement were made using advanced anti-earthquake technology. This helps in minimizing the impact of earthquake by almost half. The impact on the twenty fifth floor minimizes to about four Richters and loss of human life and property can be avoided.

This technology has now spread far and wide and has been implemented in constructing robots which help in making food, cleaning and dusting homes, operating home doors and lifts through mobile remote controls. Right from the basic necessities of human beings to the advanced luxury items and amenities, all are the products of matured modern technology. We find all the aspects of modern technology, in use, in India. We can take our car very easily, to the sixtieth floor, without even getting out of the car, because of this technology.

A beautiful co-ordination and thoughtful planning of time, money and restrictions related to modern life style and human use, are visible in the present day technology. The world and the upcoming generations are being exposed to a skilful use of computer, various related systems, a casual attitude towards a progressive march and an enriched incorporation of various strategies. We don't have a choice, but to achieve expertise in these skills. A very fluent and casual enhancement in the use of these modern techniques and technologies by all, around us, is inspiring and motivating us, to learn. It will not be an exaggeration to state here that it's an absolute necessity to collect all information and adapt to the advanced technology, in order to keep with modern times!

GREEN FOODS



Dr. Jaya Kurhekar
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MANGO

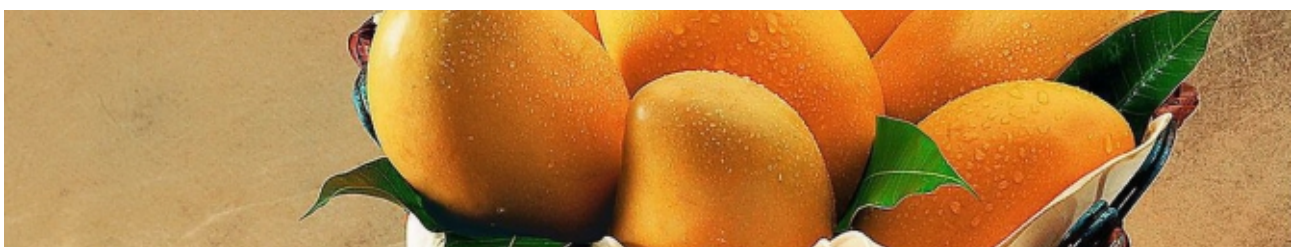
Come summer and we all eagerly wait for mangoes and water melons! Have you ever wondered how caring and loving Mother Nature is! Both these fruits are store houses of good nutrients. **Mango**, "The king of the fruits," is one of the most popular, nutritionally rich fruits with unique flavour, fragrance, taste and health promoting qualities, making it numero-uno among new functional foods, a "super fruit". The common mango or *Mangifera indica*, has an energy value is 250 kJ (60 kcal), 765 IU or 25% of recommended daily levels of vitamin A, 156 mg of potassium and 2 mg of sodium per 100 gm. Fresh mango contains a variety of nutrients, with vitamin C and folic acid in significant amounts, 44% and 11% respectively.

A variety of phytochemicals like triterpene, lupeol and numerous polyphenols are present in mango peel and pulp. A Mango peel contains pigments called carotenoids, provitamin A, beta-carotene, lutein, alpha-carotene and polyphenols like asquercetin, kaempferol, gallic acid, caffeic acid, catechins and tannins. Mango contains a unique xanthonoid called mangiferin. 25 different carotenoids have been isolated from mango pulp, the densest of which is beta-carotene, which accounts for the yellow-orange pigmentation. Mango leaves have significant polyphenol content, including xanthonoids, mangiferin and gallic acid. It is said that mangoes eaten in the peak season provide us with all these nutrients which suffice for the whole year!



Health benefits

- Mango fruit is rich in pre-biotic dietary fibre, vitamins and minerals.
- It is stuffed with antioxidant compounds like poly-phenolic flavonoids.
- It has been found to protect against colon, breast, leukemia and prostate cancers. The *polyphenolic anti-oxidant* compounds are known to offer protection against breast and colon cancers.
- It is an excellent source of **Vitamin-A** and flavonoids like *beta-carotene, alpha-carotene, and beta-cryptoxanthin*. Together; these compounds have been known to have antioxidant properties and are essential for vision. Vitamin A is also required for maintaining healthy mucous and skin.
- Natural fruits rich in carotenes are known to protect from lung and oral cavity cancers.
- Fresh mango is a good source of potassium, which is an important component of cell and body fluids that helps controlling heart rate and blood pressure.
- It is a very good source of vitamin B6 (pyridoxine), vitamin C and vitamin E. Consumption of foods rich in vitamin C helps the body develop resistance against infectious agents and scavenge harmful oxygen-free radicals. Vitamin B-6 or pyridoxine is required for GABA hormone production within the brain and also controls homocysteine levels within the blood, which may otherwise be harmful to blood vessels resulting in coronary artery disease and stroke.
- It contains moderate amounts of copper. Copper is a co-factor for many vital enzymes, including *cytochrome c-oxidase* and *superoxide dismutase* with co-factors manganese and zinc, required for the production of red blood cells.
- Mango peel is rich in phytonutrients like pigment antioxidants like carotenoids and polyphenols.





WATERMELON

Watermelon is another much awaited fruit in summer. Watermelon *Citrulluslanatus* is one of the most powerful, body-healing fruits! A watermelon contains about 6% sugar and 91% water. As with many other fruits, it is a good source of vitamin C and is low in fat and sodium. The amino-acidcitrulline is produced in watermelon rind. Watermelon pulp contains carotenoids, including lycopene. Watermelons are 92 % water, but this refreshing fruit is soaked with nutrients. Each juicy bite has significant levels of vitamins A, B6 and C, high levels of lycopene, antioxidants and amino acids with a modest amount of potassium. It is fat-free, very low in sodium and has only 40 calories per cup. Watermelon's high lycopene levels, about 15 to 20 milligrams per 2-cup serving, make it the most desirable inclusion in diet! Lycopene is a phytonutrient, which is a naturally occurring compound in fruits and vegetables that reacts with the human body to trigger healthy reactions.

It is the red pigment that gives watermelons, tomatoes, red grapefruits and guavas their color. The amazing health benefits of watermelon cover everything from your brain all the way to the cells in your feet. Watermelon rinds are also edible, but most people avoid eating them due to their unappealing flavour. They are used for making pickles and sometimes used as a vegetable. The seeds have a nutty flavour and can be dried and roasted, or ground into flour. The rind is stir-fried, stewed or more often pickled, and pickled watermelon rind is also sometimes eaten. Watermelon juice can be made into wine, on its own or blended with other fruits. An alcoholic treat called a "hard watermelon" is made by pouring liquor into a hole in the rind of a whole fruit, and then eating the alcohol-permeated flesh. Lycopene has been linked with heart and bone health and prostate cancer prevention. It's also a powerful antioxidant thought to have anti-inflammatory properties.

The redder the watermelon gets, the higher the concentration of lycopene, Beta-carotene and phenolic antioxidant content. All parts of the watermelon are good, with a lot of nutrients throughout, including the white flesh nearest the rind. Another phytonutrient found in the watermelon is the amino acid citrulline, which converts to the amino acid arginine, promoting blood flow, leading to cardiovascular health, improved circulation, erectile dysfunction improvement.



Health benefits

- The lycopene in watermelon is especially important for our [cardiovascular health](#) and in promoting bone health. It improves blood flow via vasodilation. Dietary lycopene reduces oxidative stress which normally reduces the activity of osteoblasts and osteoclasts (the two major bone cells involved in the pathogenesis of osteoporosis), thus stronger bones for those consuming lycopene-rich foods.
- Watermelon is also rich in potassium which helps to retain calcium in your body, resulting in stronger bones and joints.
- The fruit's concentrations of citrulline and arginine are good for your heart. The citrulline in watermelon has been shown to reduce the accumulation of fat in our fat cells. Citrulline is an amino acid which converts into arginine with help from the kidneys. When our bodies absorb citrulline it can take the step of converting into arginine if so required. Citrulline, when consumed, has the ability to block the activity of TNAP (tissue-nonspecific alkaline phosphatase) which makes our fat cells create less fat, and thus helps prevent over-accumulation of body fat. Arginine can help improve blood flow and may help reduce the accumulation of excess fat. Watermelon extracts helped reduce hypertension and lower blood pressure in obese adults.
- Watermelon is rich in phenolic compounds like flavonoids, carotenoids, and triterpenoids. The carotenoid lycopene in watermelon is particularly beneficial in [reducing inflammation](#) and neutralizing free radicals. The tripterpenoidcucurbitacin E is also present in watermelon, which provides anti-inflammatory support by blocking activity of cyclo-oxygenase enzymes which normally lead to increased inflammatory support. Ripe watermelons contain higher amounts of these beneficial phenolic compounds. Lycopene is an inhibitor for various inflammatory processes and also works as an antioxidant to neutralize free radicals. Additionally, the watermelon contains choline, which helps keep [chronic inflammation](#) down.



- Anti-inflammatory foods can help with overall immunity and general health.
- Watermelon is a natural diuretic which helps increase the flow of urine, but does not strain the kidneys (unlike alcohol and caffeine).
- Watermelons help the liver process ammonia (waste from protein digestion) which eases strain on the kidneys while getting rid of excess fluids.
- Watermelons' high water content can help keep you hydrated and their juice is full of good electrolytes. This can even help prevent heat stroke.
- Rich in potassium, watermelon is a great natural electrolyte and thus helps regulate the action of nerves and muscles in our body. Potassium determines the degree and frequency with which our muscles contract and controls the excitation of nerves in our body.
- Watermelons have an alkaline-forming effect in the body when fully ripe. Eating lots of alkaline-forming foods (fresh, ripe, fruit and vegetables) can help reduce your risk of developing disease and illness caused by a high-acid diet (namely, meat, eggs and dairy).
- Watermelon is a wonderful source of beta-carotene which is converted in the body to vitamin A. It helps produce the pigments in the retina of the eye and protects against age-related macular degeneration as well as prevents night blindness. Vitamin A also maintains healthy skin, teeth, skeletal and soft tissue, and mucus membranes.
- The vitamin C content in watermelon is astoundingly high. Vitamin C is great at improving our immune system by maintaining the redox integrity of cells and thereby protecting them from reactive oxygen species, which damage our cells and DNA. Vitamin C is essential to the formation of new connective tissue. The enzymes involved in forming collagen (the main component of wound healing) cannot function without vitamin C.
- The watermelon contains fibre, which encourages a healthy digestive tract and helps keep you regular.
- Vitamin A in water melons helps keep skin and hair moisturized, it also encourages healthy growth of new collagen and elastin cells and promotes healthy collagen growth.
- Drinking watermelon juice before an intense workout helps reduce next-day muscle soreness and heart rate, attributed to watermelon's amino acids citrulline and arginine, which help improve circulation.





Health benefits

- Watermelons may be helpful in reducing the risk of cancer through their antioxidant properties. Lycopene in particular has been linked to reducing prostate cancer cell proliferation.

Thus, eating seasonal fruits, in the right time, in right amounts proves beneficial for our health. Keeping in tune with Mother Nature, keeps us in the Best of Healths!!!

Green Toon



Architect
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Editor, Greenery

A MESSAGE FROM NATURE

Collection: Dr. Padmaja Patil
Translation: Dr. Mrs. Jaya Vikas Kurhekar

We have a lot of minor and major components around us, which play a very important role in our life. There exist innumerable varieties of medicinal plants. We can always plant some of them in our gardens, kitchen gardens and use them for health benefits. It has been proved beyond any doubt that these medicinal plants and their components act as remedies for very minor ailments to major fatal diseases. Besides, we all can also work towards creating a balanced environment. We can celebrate the days designated for nature lovers and convey the message to the masses.

Man is an inherent component of nature. As mother's milk, is for a small child, medicinal plants available in nature, are for human beings. They will be extremely beneficial for us if care is taken to use them intelligently and sparingly. As per the saying, "Familiarity breeds contempt", we too are uncaring about the flora and fauna, around us. We all should preserve, conserve and propagate the green wealth around us and use them for health purposes, as per their inherent capacities. Unknowingly, this will help in conveying the knowledge and the message to the next generations.

Some classical examples of medicinal plants which are components of "Grandmother's medicinal purse or Aajibaicha batwa" are Tulas or *Ocimum sanctum*, Aghada, Durva, Bel, Awala or *Embelica officinalis*, Korfad or Aloe vera, Gulvel, Kadu nimb or *Azadirachta indica*, Maka, Wad, Haladi or *Curcuma longa* and so many more.



HOW TO INCREASE POSITIVE ENERGY IN OUR HOUSE.....

- Open all windows in the house and allow fresh air and sunshine to enter the house. Free flowing air and sun are negative energy removers.
- Dispose off all the old unwanted things lying in the house. Clutter is a negativity magnet. It attracts and accumulates negative energy in the house.
- Walking barefoot in the house helps all your negative energy to be absorbed by the earth. grounding is important to keep the energy balance in our body.
- In the olden days, footwears were kept out of the house. People used to enter the house only after washing feet with water. This action ensures that all the negativity remains outside or are grounded by earth and does not enter the house. Now it has become difficult to keep the footwear outside. So preferably remove footwear near the entrance door.
- Go out in the open air. Take walks in the garden or open ground. Being amongst nature re-energizes or charges you fully.

- Sweeping the floor also ensures that the negative energies are shaken and moved out with the dirt.
- Rock salt is another negativity remover. Wash or mop your floor with a fistful rock salt in a bucket of water. This ensures that every nook and corner of the house is rid of negative energy.
- Potted plants or trees around your house or society also ensures more positive energy in the house and area.
- Bathing or Soaking your legs and hands in rock salt water once in a while removes the negativity attached to your body and cleanse your aura.
- Repetition of Prayers, increases 100% positive vibrations in the house.
- Keep your thoughts, action and speech positive. Negative thoughts will bring in negative vibes. So avoid all negative thoughts, speech and actions.
- Keep your house well lit and illuminated. Light removes negativity.
- Keep faith in God and in yourself.
You are the Creator of your own destiny by the choices you make.

Stay Green
Stay Blessed

.....Compiled by **AGS**





Tivhala

Exquisite space transformation !!”

.....Suvarna Lele

Ar. Pramod Chaugule

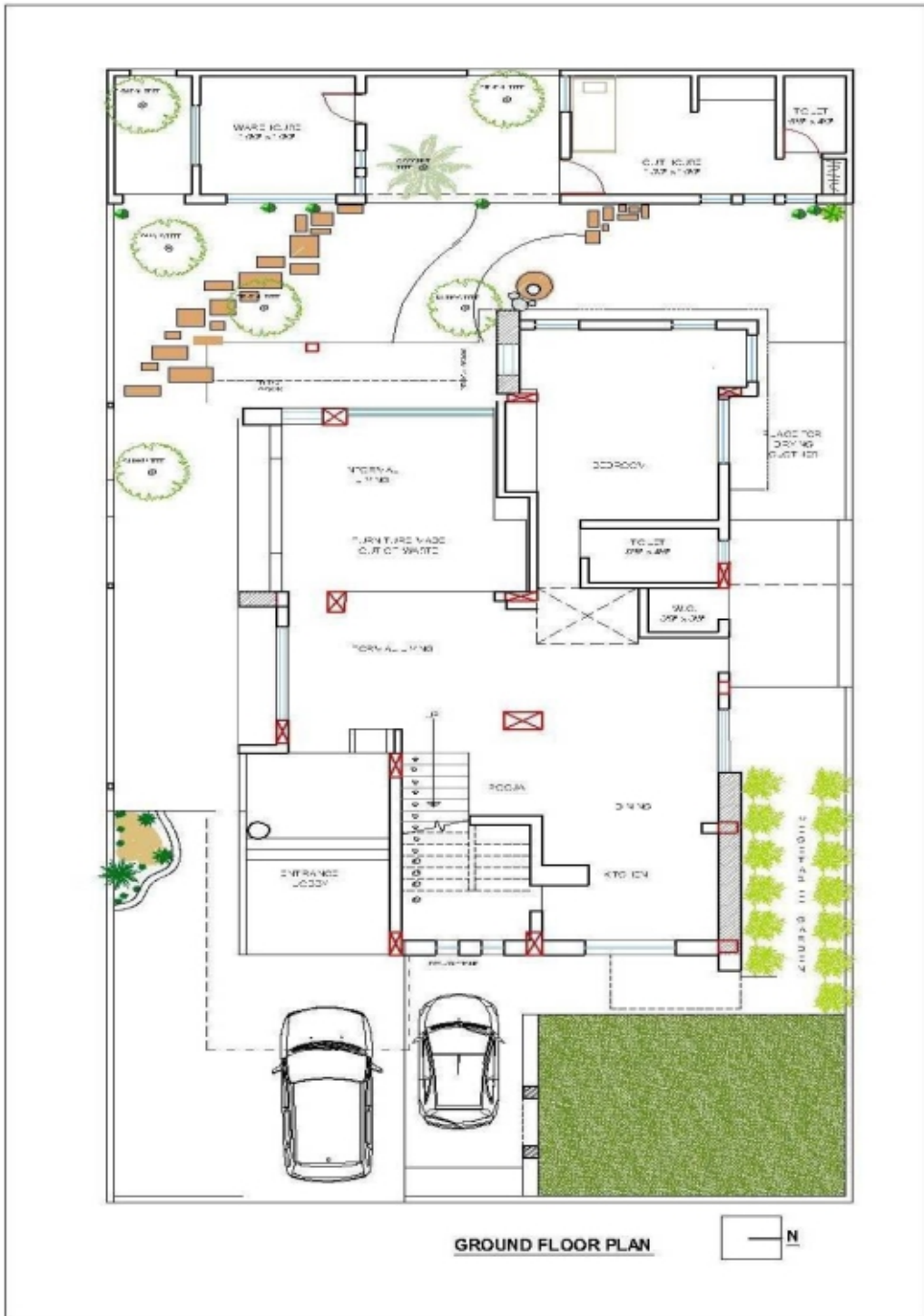
Project Planer

Jivhala, a residential bungalow is situated in tranquil area of Sharada Co-op. Housing Society. It is a two-storied residence belonging to Architect Pramod Chaugule and his family.

Bungalow was constructed as per the prevailing style of planning with two bedrooms, living and kitchen areas. First floor was added later. More space was required for the guests and teenager children. The existing plan was rearranged and modified to make it more open, green catering to all requirements of the family.

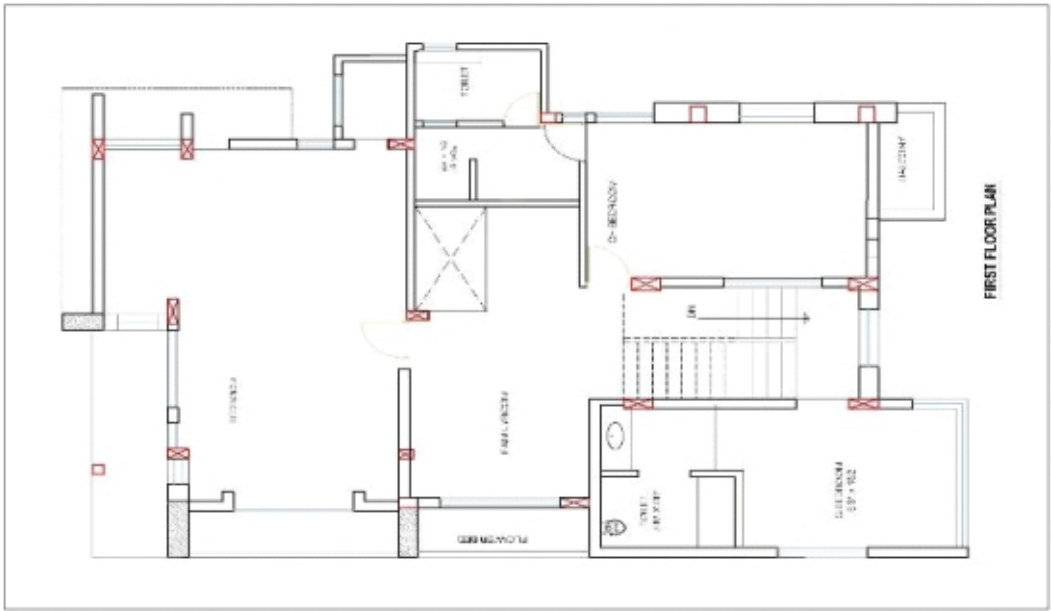
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Simplicity and minimalism are the fundamentals of this design. Use of local materials and wastage from other sites has reduced the cost of the structure establishing its strong relationship with the nature.



Ground Floor Plan

The nature is brought inside through huge door and window openings which face a green lawn, vegetable garden or patch of informal garden along with trees. Planning clearly reflects the principle of ecological design where the materials and their treatments on external facades as well as interiors reflect the simplest and cheapest forms of local and reused materials. Their appropriate applications have given them the required grace.

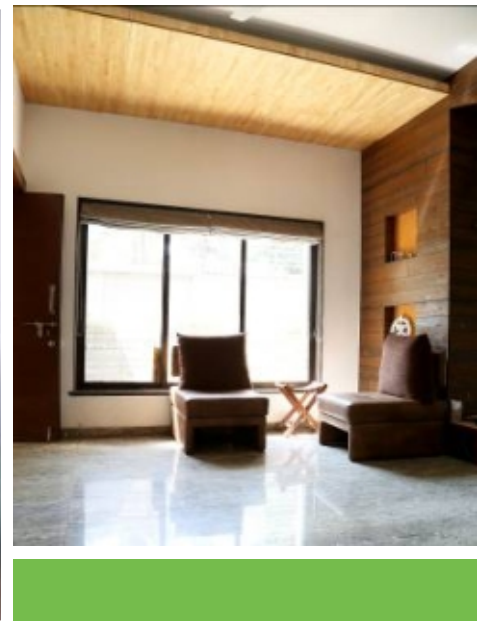


First Floor Plan

INTERIOR PLANNING

Redesign constitutes of proper arrangement of spaces where the minutest detail right from the entrance to a terrace is very well thought about. Entrance constitutes a place for visitors sitting along with storage for foot wares.





Internal space gives a feel of magnificence by removal of internal walls. The space becomes one with just the transition of activities. Living room is categorised into informal and formal sitting spaces.

Furniture is minimal with leather upholstered sofas having white, cream, coffee brown and grey colours. Informal sitting is furnished with cream coloured sofas, black granite flooring and green curtains. Lawn area beyond is perceived as a continuation to the informal area. A sitting cove is created along one wall in a niche. It is painted in an in florescent yellow which makes it a focal point of the living area. Huge



Kitchen area is well-illuminated with natural light. A vegetable garden is provided abutting kitchen wall and dining area for provision of day to day vegetables.

Bedroom on the ground floor is provided with a wardrobe which acts as partition between informal living and the bed area. It is used as storage for bedroom. All the colours used in interiors are earthy with shades of brown, green, yellow and orange in combination with off white, black or greys.



A skylight is provided at first floor bringing in the diffused light in internal spaces. It imparts a dramatic effect to ground and first floor areas.



Staircase to first floor is flanked by a beautiful wall painting by artist Suresh Pandit. A huge family-photo enhances the homeliness of the house.



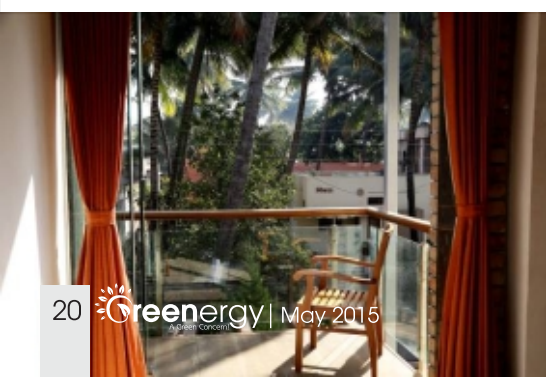


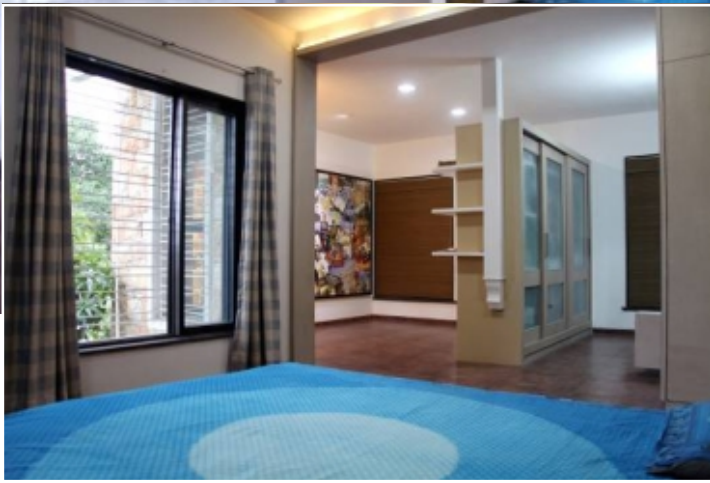
Small area from the family room is redistributed amongst Master and Children's bedrooms providing each room with sufficient space for toilets and walk in wardrobes.

Family room is located at the center of bedrooms for a proper linkage. It is illuminated by a skylight and is also provided with a small patch of lawn adjacent to the light duct.



Children's room is redesigned by removal of existing terrace and provision of utility spaces for wardrobe and balcony areas. Balcony opens out to a landscaped area below planted with lawn and indigenous trees. A cosy toilet area along with walk in wardrobe is added to children's bed area.



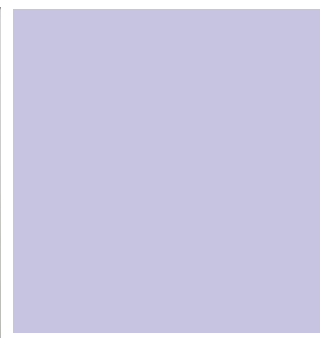
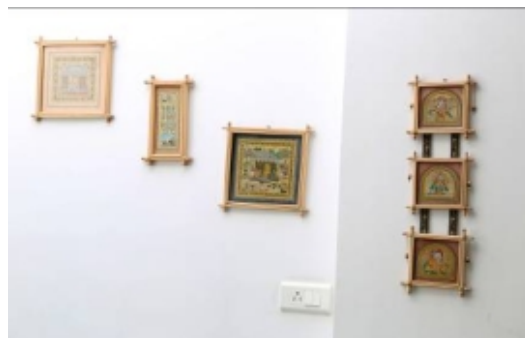


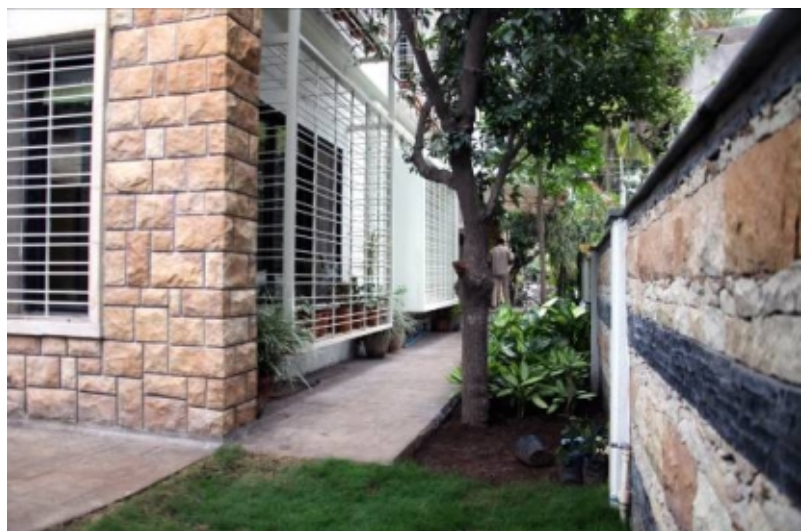
The other door of family room opens in master bedroom which is re-designed to accommodate the study area and an additional walk in wardrobe.

The furniture in this room is simple and made up of recycled wood. The minimalist approach towards design gives a feel of magnificence to the space.

The areas are opened out to beautiful surrounding greenery through huge windows. A cosy study corner wall is decorated by collage of well known people world-wide including the people from literature, Architecture, Celluloid, politics and so on. Overall the colour schemes used are very earthy and the plasters very rugged. Furnishing and the drapery used is in relation with the colour scheme.

The external facades are redesigned to give the total structure a solid and earthy look by usage of local stones as creamish Gokak stones and black sun dressed pointed basalt stones. Thus, an Exquisite space transformation, with **green concepts**.





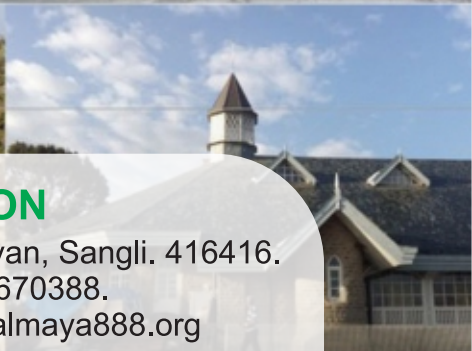
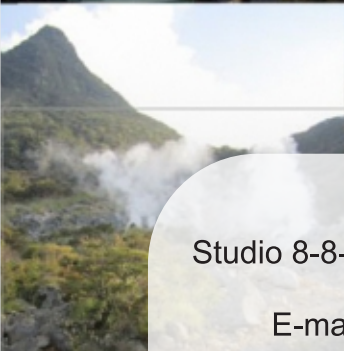
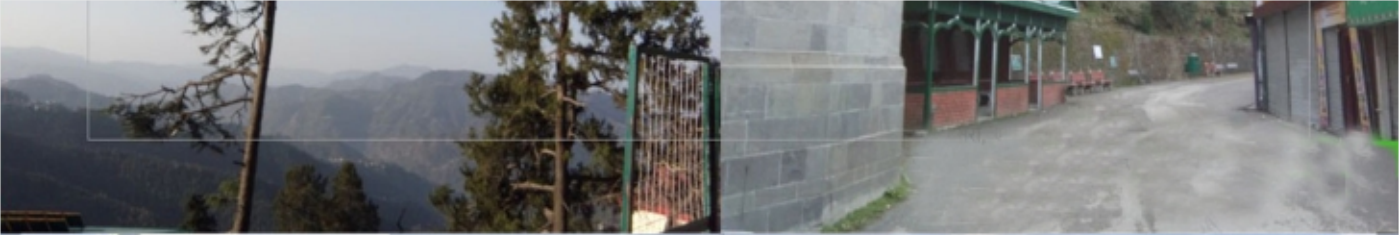
Garden in a bottle, anyone?

This miniature ecosystem has been thriving in an almost completely isolated state for more than forty years. It has been watered just once in that time. The original single spiderwort plant has grown and multiplied, putting out seedlings. As it has access to light, it continues to photosynthesize. The water builds up on the inside of the bottle and then rains back down on the plants in a miniature version of the water cycle. As leaves die, they fall off and rot at the bottom, producing the carbon dioxide and nutrients required for more plant matter to grow.



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