



# Greenenergy

A Green Concern!





## “KARN” : A Home For The Destitute

Architect  
**Pramod Chaugule**  
Editor, Greenergy

The institute 'KARN', a home for the destitute - a part of 'Bharatiya Seva Kendra', was established in 1998 with the admission of just two children and has been responsible for the adoption of more than 200 children, till date.

The story of each child is shocking and different; some born to unwed mothers, some to widows and some in utterly poor families.

'KARN' was established with an objective of standing against inhuman behaviour of the society, to provide these innocents, not merely food, clothing and shelter but also the love of families they deserve. Nobody has any right to snatch these essential necessities from a child. KARN aims to give back every right of a child to live and flourish, denied, not by nature, but by the society.

Land measuring 1079 square meters was donated to KARN, at the recommendation of finance minister Mr. Jayantrao Patil, with Architect Pramod Chougule's planning and Mr. Motilal Parekh's construction. The design approach is holistic, with the use of local material and simple local techniques with appropriate articulation and the support of local people. It reflects “SIMPLICITY”, which is the strength of the design. Plan is simple, inward looking and functional, where rooms are arranged around the focal area of the court yard. Public areas as visitors' area and office are situated at the entrance. It caters to the needs of small helpless children, giving them a sense of security and happiness.

### SITE

BSSK Sangli, with the help from parent organization & local donors constructed a home for children called KARN. It is located in Ghanashyam Nagar, Madhavnagar road, Mal Banglow area in Sangli. KARN can shelter 50 destitute, neglected & abandoned children. Children come from different places in & out of Sangli. They are many a times, premature, malnourished & very weak. BSSK takes them into their arms & gives them the best possible medical treatment & love.

## CONCEPT

To incorporate Green design principles, the easiest way is to select ECO - friendly materials and to make use of local technologies. Use of local labour and waste materials plays a significant role in reducing the cost of construction. The architecture should be observed, in relation to the energy and environment. There is a close connection between nature & technology.

This beautiful building, which is designed for the destitute children, is an outcome of these efforts. Architect's structures follow all environmental principles; it is needless to say that his own office acts as an epitome of all.

While designing the project, architect's first thought was that the design should match the psychology, likings and physical activities of the children. It is a special work contributed towards social cause.

## EXTERNAL ELEVATION



### *Pattern of compound wall.*

The external elevation from roadside shows a beautiful compound wall constructed in stones that are placed in interesting patterns along with M.S. pipes. Quarry Blasted Black Stone is used in rubble masonry. The external garden is decorated with animal sculptures & playing equipment. A big part of the plot is a landscape which gives a feeling of freshness. Many of the existing trees have been preserved. The area is good & the environment is healthy, as many trees like CHAFA, HEBISCUS and GULMOHAR have been planted.

The whole building is constructed by clay burnt bricks, which are locally available. The plan is simple and functional with a Ground and a First floor. When this project was offered to Architect Pramod Chaugule, the client expressed a desire for the building to be built with child psychology in mind. They wanted the children to have separate rooms as per their ages. The rooms were designed for 1 to 3 month babies, 4 to 6 months babies, 7 to 15 months babies, 15 month to 2 years babies and 3 to 5 years children. In a separate room, incubators have been fixed for delicate or pre-mature babies.

## CIRCULATION

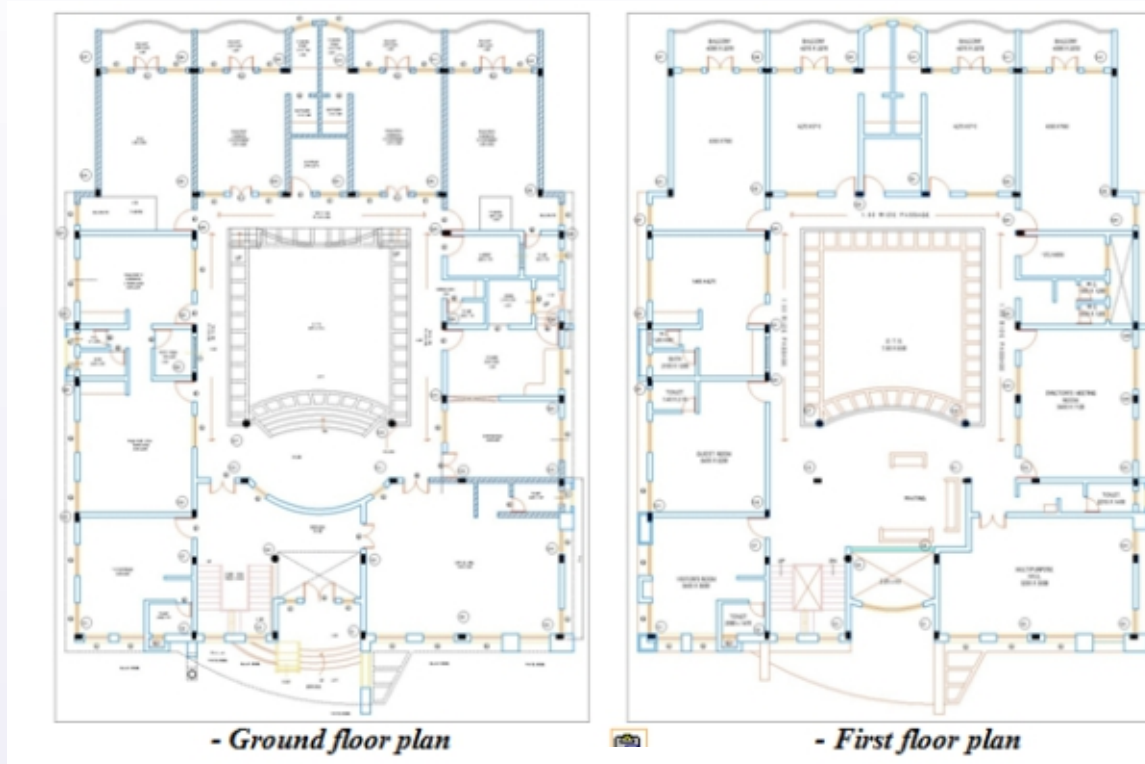


*- Big courtyard with skylight*



*- Inviting wall painting*

When a person enters the building, one is welcomed by a very nice conceptual painting by Suresh Pandit. A big 7.5 m x 8.5 m central courtyard is the special feature of this building. It gives the natural light & ventilation inside the building. It is covered with lawn, so that small children can play on it. Some swings have been erected for playing.



Ground floor has a reception counter, a waiting lounge, an administrative office, a manager's cabin and a visitor's room. It is also provided with a kitchen and a dining area. Low level dining facility in Japanese style has been provided so that the children can eat in an easy manner. Tables are decorated with flexed cartoon pictures to make their meals interesting. Special rooms with toilets have been designed for children. Floor height is 12 feet so that the children can enjoy plenty of natural light & ventilation. Rooms are designed as per the liking of children. Cartoon printed curtains, cartoon paintings have been installed for entertainment purpose. Built - in cupboards are provided to avoid the harsh sun rays from south - east. Toilet units are placed as per the convenience of small children. Low level wash basins, commodes, tap fixtures in baths are provided. On the railings of staircases, cartoons paintings are put up. Natural light is allowed on the staircase by providing windows in a pattern. Care takers' rooms are on the ground floor. As they work in shifts, they have been provided separate rooms with separate toilets.

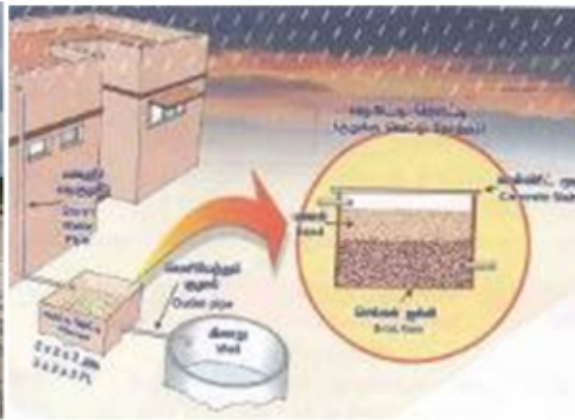
First floor has a multimedia room; a director's meeting room, a visitor's room and a special guest room. Extra rooms for further expansion have been planned. Kotah tiles are used for all the floors. It is a durable, cheap & easily available material. To cover the courtyard, semi-transparent poly carbonate sheets are used.

A big terrace is provided, coated with heat reflective paint. It gives a cooling effect even in summer. As children are of very young age groups, it helps to protect them and to maintain the temperature of the first floor, at a comfort level. Basement is designed for storage & record keeping purpose. The overall environment is kept clean & hygienic. As this organization is only for children below 6 years, special care is taken while designing.

## ENERGY SAVING ASPECTS USED IN DESIGN



**Use of poly-carbonate sheets**



**Rain water harvesting**



**Wind mill**

Energy demands are reduced by energy efficient lighting and control devices. Solar & wind hybrid power generation of 0.8 kilo watt capacity is provided. Electricity generation if necessary, during the day, is generated by solar panels and by wind mills, during the night. Renewable forms of energies like application of wind mills, solar panels, rain water harvesting have been used in the building.

Every structure stands apart, due to its it's own characters. A successful Architect takes care of an occupants' needs of visual and thermal comfort and makes it most pleasing as well as sustainable. The success of this structure lies in creating a comfortable and natural environment to its users, providing a real 'Sustainable Habitat'.

### FEATURES

- ▶ RAIN WATER HARVESTING
- ▶ SOLAR & WIND HYBRID POWER GENERATION - 0.8 K.W. CAPACITY
- ▶ CENTRAL COURTYARD WITH SKYLIGHT
- ▶ LAWN PLANTATION FOR CHILDREN
- ▶ NATURAL LIGHT & VENTILATION
- ▶ SMALL GARDEN OUTSIDE – PLAYING EQUIPMENTS
- ▶ BASEMENT STORAGE
- ▶ SEPARATE TOILETS – SANITARY FITTING AS PER CHILD REQUIREMENTS & LIKING
- ▶ HYGIENIC ENVIRONMENT
- ▶ DINING FLEX WITH CARTOON PRINTS
- ▶ CARTOON WALL PAINTINGS
- ▶ BUILT- IN CUPBOARDS ON SOUTH - EAST SIDE TO CUT THE HARSH RAYS
- ▶ TERRACE WITH HEAT REFLECTIVE COATING – COOLING EFFECT- TO AVOID HEAT IN SUMMER

### FACT FILE

- ▶ NAME OF PROJECT : KARN.
- ▶ NAME OF CLIENT: BHARTIYA SAMAJ SEVA KENDRA.
- ▶ NATURE OF PROJECT: ORPHAN RESIDENTIAL.
- ▶ PLOT AREA: 1095 SQ.M.
- ▶ BUILT UP AREA: 364 SQ.M.
- ▶ DATE OF BEGINNING: 21<sup>ST</sup> JULY 2003.
- ▶ DATE OF COMPLETION: 20<sup>TH</sup> MAY 2004.
- ▶ PRINCIPAL ARCHITECT: AR. PRAMOD CHAUGULE.
- ▶ DESIGN TEAM: Er. SHRIKANT PATIL, Er. SHIREESH PATIL, Ms. SHARAYU.



# DEAREST MOTHER EARTH !!!



Dr. Jaya Kurhekar,  
Executive Editor, Greenergy

Dr. Jaya Kurhekar,  
Sangli, Maharashtra, India, Earth,  
Dated: Today

Dearest Mother Earth,

Greetings and holy tribute to you! I am penning down my heartfelt emotions, pent up within me, for a long time now. Mother, we are all your children. You know all of us very well and I am sure, as you have always done, you will forgive all of us, for all the sins we are committing.

You are our dear mother; you have given birth to us! You are the one supporting us! We are surviving in your lap, working with your strong support, seeking solace in your embrace. You are so loving, so caring, so pure and so natural. And yet, here we are, so cruel, so inhuman and so greedy!

We rely on your oceans to provide us with abundant fish, marine flora and fauna. We depend on your forests for food, wood and medicines. We depend on your rivers, streams and lakes for water, our life line! Our expectations and livelihoods are based on the hope and surety that you and your environment will always support us!

Sometimes I feel we are taking everything too much for granted. Your “free services and resources” are the invisible foundation that supports our societies, our economics and our endeavors. Yet, our economies are unwittingly encouraging us to misuse and destroy nature. The “free services” so graciously endowed by you are undervalued. Your most valuable goods and services like water bodies are being utilized very poorly. The worst part is that, the same activities that pollute and deplete your natural capital, are being acclaimed and highlighted as major contributions to our economic well being!

Mother, you have been so kind to us! You have always provided us raw materials, purified and regulated our water supplies, absorbed and decomposed our wastes, cycled nutrients, created and maintained soils, provided pollination and pest control, regulated global and local climates, your gifts to us, humans, are unending!

Forests in your lap supply us timber, provide habitat for insects and birds that pollinate crops and control pests. They also resist the impact of rainfall, reducing its force, by the time it reaches the ground, decreasing the amount of soil erosion. Roots hold soil in place. Forests help in recycling, pumping, stabilizing water and climate. Oxygen, the life line of humans, is created by plants. Cutting down of trees, for use as timber, is the least profitable and least sustainable use of a forest.

Honey bees are one of the important family members of the forests. Their service as pollinators is much more valuable than the honey they collect. Unfortunately, these bees are being intensely exposed to pesticides and herbicides and their population is depleting rapidly. Our indiscriminate cutting down of forests, indiscriminate use of vehicles, fertilizers, pesticides etc has irreversibly destroyed your environment, dear mother! We are now becoming aware of it and are trying to spread this message to mankind, all over the world. We can always encourage more planting of trees and forests, which have always supported our livelihood. Harvested forest wild goods can provide food and income security. They have always been a part of our flexible and sustainable livelihood systems. Vegetables, fruits, fish, dyes, medicines, materials for weaving and thatching are all products that can provide an earning. Wild mushrooms collection, natural wood that can be woven into furniture, can provide some alternatives.

Mother, your natural ecosystems have been extensively degraded, fragmented, converted and stripped off its diversity and services. Nature's products and valuable services are getting lost with them too. Birds, insects, worms, microorganisms, though small in size and seemingly insignificant, are of enormous values. Can you ever forgive us, for creating adverse conditions for them to thrive? Although late, I still feel that everything is not lost! As the wise say, its better late than never!! We must support and protect our natural resources providers by protecting their habitat! Avoiding till farming methods, substantial reduction in the use of agricultural chemicals, allowing under ground economy of nature to flourish, protecting migratory routes, saving nectar corridors, creating buffer areas for trees, protecting havens of resident and migratory birds, insects and animals, reducing erosion, controlling pollution are some methods to help our helpers. Markets can be formed and policies can be created, keeping in mind, the value of nature, maintaining the ecosystem services and processes. Ground water, the life line of human beings and all life on earth, should be appropriately valued.



In our short sighted approach, we have forgotten to look beyond us! We have the minimum moral responsibility of ensuring that our future generations will get at least the same level of nature's services that we are enjoying today. We must take care of what legacy we leave behind us. Are we being so selfish that we can't even think of our children? We need to change our attitudes and practices. We have to live within the carrying capacity of our supporting systems. WE have to learn that we can take from thee and thy atmosphere, only so much that we can return back to you!

O Mother Earth,

“What of thee I dig out,  
Let that quickly grow over  
Let me not hit thy vitals or thy heart!”

I am truly sorry for all that we have done but I also promise to make a beginning towards repairing the damage.

Always yearning for your love, my dear mother,

Yours Loving,  
Daughter.

To,  
Mother Earth,  
C/O Universe,  
Milky Way.







It is a well known fact that about half of the total investments in our country go to the construction sector. About 90% of the investments in this field come from the private sector. A large chunk of the investors belonging to the middle income group and lower income group, invest their life long savings to build their own houses (as banks and financial institutions generally do not provide them with finance for wants of several necessary documents). It is very essential to help this large segment, by providing them necessary information regarding the cost saving techniques of construction, for saving their hard earned money and at the same time, saving precious materials like cement and steel, which can be used for more construction.

Moreover, several Government organizations as well as private centers are trying to introduce the new building materials as well as composite construction techniques. They have come up with several cost saving technologies too, which go unnoticed and are hardly ever used on actual sites. Cost effective housing is one of the major focused areas in India, where a systematic approach is required to construct cost effective, safe and environment friendly houses for the citizens. Approximately, about 80 % of the cost, for a typical house, is spent on material component and 20% on labor component. This ratio needs to be changed as the targeted population including people affording houses with 50 sq. m. of built-up area can spend more on labor but less over materials. Construction sector provides employment to 16% of the work force.

An approach is required where people can be trained to construct their own houses through self help or using their own labor. This will help them in getting trained and besides, alternative quality building materials can be produced at site, resulting in saving of the cost. The excess building materials can be sold, resulting in further reduction of the construction cost.

During mass construction, planning and layout of the structures can be done in such a way that all services including climatology can be optimized. The building blocks can be placed with a view to optimize the building materials, in such a way, so as to have maximum length of shared walls.

### Background Scenario

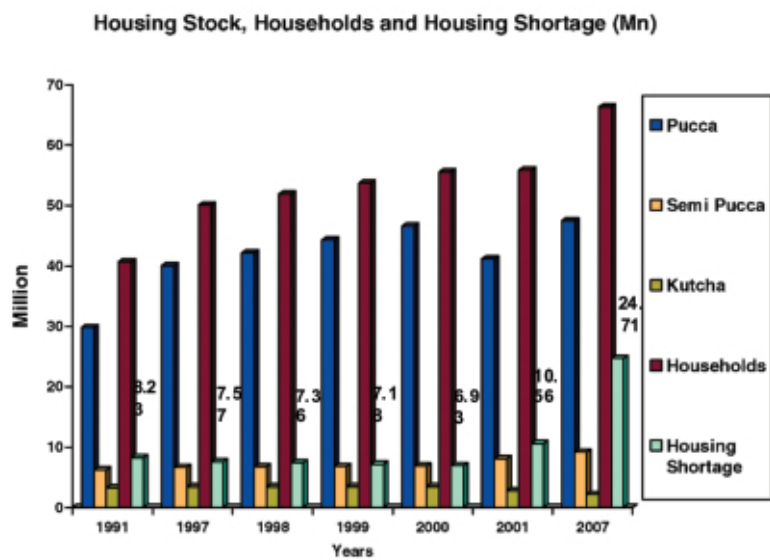
According to the census conducted by the Government of India in 2001, urban habitats, which include population figures in the range of 10,000 - 20,000, are most numerous (1,344 urban agglomerations or townships in all). This is followed by those with a range of 20,000 - 50,000 people (1,151); 5,000 - 10,000 (888); 50,000 - 99,999 (401); real towns and cities with a population of 1,00,000 and above (393) and finally those with less than 5,000 (191). Thus, there are in all 4,378 urban centers or townships, which house the 285 million urban citizens of the country. Of these, 35 cities have more than 1 million people each, leading to, in all 107.88 million people. That leads to the conclusion that the remaining 177.12 million or more than half of the total urban population of the country lives in small-sized towns or urban agglomerations.

### Why cost effective housing?

India is undergoing a transition from rural society to an urban one because of the increasing migration of population from rural areas to urban ones. Demand and supply of sites and services are disproportional. A disparity exists between high land costs, high construction costs and lower incomes leading to a non-sustainable situation.

There are several burning issues related to low cost and eco-friendly construction, such as,

- Lack of equitable supply of land, shelter and services at affordable prices.
- Depletion of construction resources.
- Negligence of ecology in design.
- Lack of application of cost effective strategies.
- Lack of application of energy efficient strategies in construction.



As per the tenth plan, total housing shortage in urban areas works out to 24.71 million dwelling units.

## **Necessity of Providing Affordable housing**

### **Problems Facing Current Construction Practices / Contracts and measures that could be taken for saving the costs:**

#### **Necessity for cost reduction**

Increase in construction costs directly affects the economy. This is due to the high cost of operations which can be reduced at several levels by using efficient planning, cost effective technologies and materials, use of alternate techniques available, proper project management and procedures, improving the procurement and dispute resolution mechanisms along with the measures for initiating more competition and transparency among contractors.

The surplus gained from saving of this surplus cost can be used for activities like labor welfare, implementation of modern machinery, up gradation of technologies and construction of more houses. To make the processes in construction industry standardized and efficient, the conditions for bidding should be standardized and conditions should be laid for uniform standardized bidding.

As a part of the process of standardization and improving efficiency in the construction sector, harmonized bidding conditions and standard bidding documents for domestic construction contracts have already been developed.



## ■ NECESSITY OF PROJECT MANAGEMENT FOR SAVING COST AND TIME



The projects are to be worked out to their minutest details from their inception till the end of implementation, to save further problems. Prior to the project planning there should be an extensive field investigation along with sufficient data to start a project. The collected data should be analyzed before starting the working plan. The five steps which need to be controlled from inception to completion of the project would be;

### Initiate

- ▶ Identify the goal
- ▶ Determine preliminary resources
- ▶ Identify the risks and assumptions.

### Plan

- ▶ Identify the project activities
- ▶ Estimate the required cost and time
- ▶ Arrange the activities sequentially
- ▶ Identify the critical activities.

### Organize

- ▶ Recruit suitable project manager and project team
  - ▶ Organize the project team
- ▶ Recruit work as per identified sequence and activity.

### Control

- ▶ Establish control tools
- ▶ Review and revise the period schedules periodically
  - ▶ Prepare status reports
- ▶ Issue the change orders whenever necessary.

### Close

- ▶ Hand over to the client and receive the acceptance note
  - ▶ Document the project properly
    - ▶ Install the deliverables
  - ▶ Conduct a post project audit.

## ■ **Necessity for a proper Dispute resolution mechanism and the key constraints faced by the construction industry:**

- ▶ Design finalization, pre-construction issues (delays in site hand-over), timely payments and other project implementation issues.
- ▶ Availability of skilled human resources.
- ▶ Poor governance, corruption and lack of decision-making.
- ▶ Project management and non-adherence to the dispute resolution mechanism prescribed in the contract.
- ▶ All these lead to disputes between the owner and the contractor at several stages of construction.
- ▶ The disputes between the contractor and the owner may lead to cost over runs and delays in the project adversely affecting the economy of the project. This involves a great deal of money locked up in these unforeseen events. A comprehensive dispute resolution mechanism needs to cover all the concerned problems.
- ▶ At present, the Arbitration and Conciliation Act, 1996 is the basis for all dispute resolutions.

## ■ **Necessity to improve construction workers' conditions**

The key factors of the construction activity are the workers, whose health and living conditions need to be seriously considered and improved. Construction workers are exposed to a wide variety of health hazards at work. The exposure differs from job to job. Due to the hazards faced by construction workers, an estimated percentage of 10 - 20% of the work force has to face work related diseases. They have to face the chemical health hazards caused because of fumes, dust, mist, poisonous vapors and so on. It is risky to handle the materials such as asbestos or silicon as they may cause diseases like silicosis or asbestosis. Many glues, paints and adhesives create poisonous gases which are harmful to the human body.

There are possibilities of physical hazards due to various factors like handling of instruments, exposure to noise, vibration, extreme heat or cold, work in windy, rainy, snowy or foggy weather, use of arc welding, exposure to rough weather and so on. While implementing any project, health, welfare and safety of workers should be a prime consideration. The workers are also exposed to postural disorders along with degenerative disorders.

Exposure to environmental diseases, psycho-social hazards and biological hazards is also a part of their life against which they need a protection. At present, The Model code of Practice for Labor welfare and 2% Labor cess imposed on works are meant for Labor Welfare.

## ■ **Role of Government in propagation of cost effective housing. Building Centers and Technology Extension:**

The concept of Building Center emerged in order to promote cost effective building constructions throughout the country. It was felt that alternate or unconventional type of construction which was not there in Government department work specifications and the rates of which are not available in the schedule of rates, may be promoted through Building Centers.

The technologies in the reputed research laboratories like CBRI, SERC, Laurie Backer, Anna University, Development Alternatives, Cost Ford, Auroville Centre etc may be taken up and Government institutions like HUDCO, BMTPC may provide the financial and marketing support to the Building Centers.

HUDCO and BMTPC have documented many technologies and demonstrated them by constructed many housing schemes through Building Centers. Many State Governments have also come forward for persuasion and incorporated some of the technologies in their work manuals and the rates for them were incorporated in their SOR. Building Construction has spread in many parts of the country and the cost of the houses constructed was less than conventional construction costs. Building Centers have spread the awareness and created the training facility to train the masons in cost effective building construction. Many Building Centers have also started selling the Finished Building Materials and created an impact in the local areas.



## IN NEW ZEALAND

Author - Ar. Vivek Deshpande.  
Translator - Ar. Nandini Deshpande

Looking back at my childhood days, I remember staying in a small semi urban locality like Sangli where our home was located in a thickly populated area known as Khan bhag. Most of our time after school and studies, was spent playing on the roads, playing marbles, hide and seek, atya patya and cricket. While playing we did not mind and were never bothered about anything like searching the open gutters for lost marbles. The cricket ball was made from sticky seeds of a Gulmohar tree. Everything was so fresh, green and of course environment friendly. All the things were taken from nature and given back to nature. There were hardly any vehicles on the roads; pedestrians and kids playing on the streets were given due respect by one or two stray vehicles, which passed by.

Were we not aware about the natural forces???. We were. But the terms were not known to us, in those days of innocence. The five forces of nature - Earth, Water, Light, Air and Space.... all are equally important for our very existence. With education came the awareness about the enormity of these forces and then came the feeling of awe, admiration, gratitude and worship. When I visited New Zealand all these thoughts came to my mind at once. New Zealand is one such country which not only respects these forces but also conserves and utilizes them for the benefit of people.

Earlier, I always thought, the pictures given in the travel magazines and on the websites were of selected spots from this country, just to impose a beautiful picture on the minds of people and attract them to visit it. But I realize now that it is the entire country that is beautiful. One starts experiencing this from the aerial glimpses while descending. The moment we step on this land, the beauty envelopes us. Wonderful landscapes, excellent streets, greenery along the streets, beautiful gardens, inviting street furniture, fresh air; everything is maintained meticulously.

Driving is a pleasure here. On top of all this, one can feel the respect given to fellow human beings. If a person is standing near a zebra crossing or walking on a footpath towards a zebra crossing, all the vehicles on the road come to a halt and allow the person to cross. No honking, no rushing...!Is this related to the mentality of the society? The answer is YES. But from where does this develop? The reason is population. The basic population is very less and wants to remain so. When anyone intends to migrate to this country, each and every parameter is thoroughly judged. One cannot stay on the streets or slums here. People here want to keep their country beautiful and cater to all the needs of every member of the society. Once a person is accepted as a resident, all the facilities are provided by the government.

The five forces of nature which have been changing for ages are now being rapidly affected due to industrial growth. They are fully taken care of, in New Zealand. Conscious efforts are taken here, for the conservation and retaining of the biodiversity. Industrial growth has been kept to a minimum. Only the most necessary goods are produced here. The economy depends on agriculture and dairy. Environmental pollution is kept at a minimum. Every vehicle running on the road needs to have a warrant of fitness, which has to be renewed every six months. This ensures that the pollution level due to vehicles, is minimum. Maximum use of public transport is also a major factor in achieving this. No litter or garbage is seen anywhere. The house waste is sorted and kept in separate bins outside the house. The garbage truck comes on the allotted day and picks it up. Only two persons manage this, a driver and one more person to pick up the garbage with mechanized equipment. No excess labor is put in. The entire country is kept clean and one does not find overflowing garbage bins or litter, even on the street. In addition to this there is rainfall nearly every week, which washes off all the dust. The whole city looks like a freshly scrubbed up baby, smiling at us. So fresh..so green...!

Watching the night skies is a breathtaking experience in New Zealand. The southern hemisphere sky is different from the one we see in India. Polar star is not seen. The locations of various constellations are different. I will never forget the view of Saturn, seen from Wellington. For producing electricity; wind energy, solar energy and water resources are utilized. In addition, New Zealand has converted a Bane into a Boon. New Zealand is located at the junction of two tectonic plates, as a result of which there is a constant geo thermal activity. Using the heat from this geo thermal activity, power plants have been set up at Taupo and Rotorua. On one hand, parks are developed to enjoy the beauty of the thermal colorful pools, natural spas and geysers which attract tourists from all over the world. At the same time, the forces within the earth have been thoughtfully and effectively utilized for producing energy.





This particular fact also results into frequent earthquakes in the region. All the structures are thus designed to overcome these forces. Wooden frames with light weight panels are used for housing. Multistoried buildings have steel framing and concrete paneling, with springs for cushioning, in the foundation. This has resulted in a minimum number of casualties and destruction, even during major earthquakes.

New Zealand is already experiencing the ill effects of the holes in the ozone layer of our earth. Though the weather is pleasant throughout the year, ultra violet radiation is at its highest in this country. New Zealand comprises of two islands – North and South. The capital city Wellington, commercial capital Auckland, tourist attractions like Taupo, Rotorua are located in the North Island. Wellington is at the Southern tip of North Island, with lots of hilly area. Most of the residential suburbs are on these hilly slopes, resulting into a very picturesque view. Even a very small locality away from major cities in New Zealand is comparable to a Wadi in India. It is very well planned and has all the facilities like town halls, malls, schools, hospitals etc. While designing any structure or a neighborhood or a town, the basic thought is of “Sustainability”. Everything that is built in this country is built, with the key question asked every time, 'will it be sustainable?' Only when all the parameters are answered positively, the project is taken up.

South Island has been blessed with nature's beauty. Picton, Nelson, Christchurch, Queenstown, Wanaka, Dunedin, Invercargill are some of the most beautiful towns in South Island. Almost sea like large lakes, lush green hills, snow covered mountains, waterfalls, glaciers, deep blue seas... all the aspects of beauty are seen here. One cannot stop saying 'Beautiful' and 'Spectacular'. Very safe and comfortable travel experience, is the specialty of New Zealand. People go for camping in camper vans, young boys and girls go on their mountain bikes, camping facilities are provided all over the place. All the facilities like pure water, electricity, toilets, recreational spaces, outdoor dining facilities are provided and meticulously maintained.

One of the most beautiful places in New Zealand is Milford Sound, where one can enjoy the spectacular view of the blue oceans, green mountains, springs, waterfalls, lush green landscapes and sparkling snow peaks, against a deep blue sky, all in a single place at a glance! New Zealand's abundant flora and fauna provides an uninhibited experience, an experience truly unique, unlike anything in the world. The five forces of nature have bestowed amplitude of natural beauty upon this country. It sure has made **New Zealand – “Aotearoa”** - aptly described as the **“Long white cloud”** in the native Maori language, a **“must visit”** place at least once in a life time.





## ABHALMAYA FOUNDATION

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