Green and Sustainable School - Gujarat

Preamble

School buildings are the most expensive assets, it is very important that they are developed in a sustainable way so that their construction and operation are also sustainable for future generation. Govt of Gujarat has taken an initiative to transform the existing schools into Sustainable Green Schools in the Year 2013-14.

- In 2013-14, 61 schools across all districts were transformed into Sustainable Green schools as a pilot project.
- In 2015-16, 100 Kasturba Gandhi Balika Vidhyalaya were included in this project to be transformed with more effective way and will be rated by IGBC (Indian Green Building Council) voluntarily.
- Current year 47 Schools are under the transformation process.





It is the practice of creating school structures using processes that are environmentally responsible and resource efficient throughout a buildings life cycle.

A green school building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for children as compared to a conventional school building.

Concept

Sustainability is about how we choose to live and let others around us live- today and for generations to come. It is about development that meets the need of present generation without compromising on the ability of future generation to meet their needs.

It also implies that present generation's responsibility to improve the future generation's life by restoring the previous ecosystem and resisting contributing to future ecosystem damage.

It is not about making a building or infrastructure. It is not a one time work. It is more about the how we conduct our life and activities in the day today routine, as well as how we build and use our spaces. It is a process that can keep on evolving with time.

- The initiative on Green and Sustainable Schools is about inculcating the values of sustainability amongst all stakeholders involved with the schools - the children, teachers and Head masters, School Management Committees, SSA and the Government.
- School Headmasters, Teachers, Students, Community, Architects and Engineers are being trained towards the program.
- The programme is being linked to the curriculum and teaching-learning process in the schools.



Core Vision

School as an ecosystem for learning. The school is envisioned as

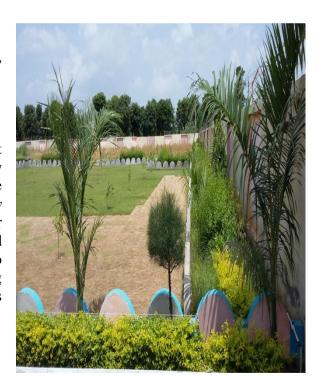
- Child development friendly
- Inclusive
- Learning resource-rich
- Safe and secure from hazards
- Optimum resource-utilizing place

Existing Schools are developed through culturally, socially and environmentally sustainable practices.

Areas of intervention in Schools

The intervention attempts to look holistically at various components of the school and analyze how their effect on the five elements of the environment - the *earth*, *air*, *water*, *sky and energy* can be made positive by modifying, altering or changing existing practices. The solutions and methods identified may be diverse and different to suit different context and regions. In existing schools, broadly, these key underlying principles are being addressed:

- 1. Optimum resource utilization
- 2. Minimum wastage
- 3. Maximum recycling/reuse



Following components are being assessed for each school in a point rating system:

I. AIR

- a. Is our School Community's use of Oxygen balanced?
- b. What is the level of air pollution in our school?

- c. Are families exposed to high RSPM levels in your village?
- d. MDM cooking in our school
- e. How do you travel to school everyday?
- f. Well ventilated rooms in our school.

II. WATER

- a. Water used by our school
- b. Sanitation and water facilities in our school
- c. Has our school adopted water conservation practices?
- d. How much rain water does our school harvest?
- e. How much water does our school recycle/reuse?



- a. Green area in our school
- b. Land covered by trees in our school
- c. Land use pattern of our school
- d. Bio-diversity in our school
- e. Soil conservation and pesticides

IV. ENERGY

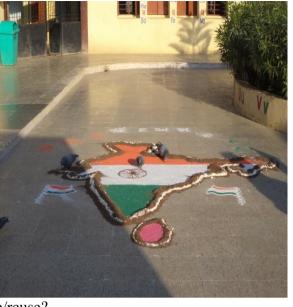
- a. Energy consumed by our school
- b. How clean are the sources of energy in our school
- c. How much energy did our school save?
- d. Energy conservation practices

V. WASTE

- a. Quantity of waste generated in our School
- b. Waste Collection System in Our School
- c. How much waste does our school Reuse and Recycle?
- d. Waste Disposal Record of Our School

VI. BUILT SPACES

- a. What is our building made of?
- b. How functional is our building?
- c. How safe and secured are our built spaces?







d. How is the upkeep of our built spaces?

In addition, School's Initiatives in all the above categories are also rated. Each the above mentioned six categories are being assessed at the school level by the stakeholders in a point score system. Each category has 100 points, total 600 points. This will help the school to assess their present status and identify specific areas for improvement in future. Based on the above assessment in each school, specific interventions and support systems are being worked out to improve the points rating in each school, with solutions and ideas that are practical and sustainable in the long run. The data will also help in designing new schools in future. The entire effort is to develop an in-house capacity within SSA to keep the systems and processes also sustainable in the long run.

Benefit of a Green School Programme

- Save money through reduced consumption of goods and energy savings,
- Increase efficiency of operations and use of resources,
- Create favorable learning and teaching conditions,
- Generate community goodwill,
- Avoid future liability problems,
- Educate the next generation on the value of caring for the environment.
- Curriculum enrichment through practical experiences.
- Development in ownership; personal and social.
- Enhancement of school profile.
- Providing a vehicle for developing community cohesion.
- Enhancement in overall annual school result.
- Consistency in student's Fitness level.
- More involvement of student in learning process.
- Discipline is driven by respect, care and concern.
- Students are nurtured in a natural environment.
- Reduction in parent complaint ration towards learning.
- A rise in trust and faith of parents towards school.
- Rise in teacher's efficiency, proficiency and performance.
- Convenience and conductive environment towards making students true Global citizen.

Achievements

- The Green School Programme has been rewarded with the highest Independent honor in Education Department at National Level as SKOCH PLATINUM AWARD on 9th September, 2016 at Hydrabad.
- The KGBVs are under the rating system by IGBC (Indian Green Building Council) and one of the KGBV in Gandhinagar district is certified for IGBC GREEN SCHOOLS GOLD.



