Numericks

$3.39 bn is the amount that the Indian Renewable Energy Development Agency will be investing for the development of renewable energy projects during the 11th Five Year Plan

Sustainable living for a simple life

It is possible to lead a satisfying life using minimum energy

Anil K Rajvanshi

I live in Phaltan, a small town in Satara, and run an NGO called Nimbkar Agricultural Research Institute (NARI).

We work in areas of agriculture, renewable energy, animal husbandry and sustainable development. Since I work on sustainable developmental issues, I also try to live sustainably. I would, therefore, like to share my experience of living a sustainable, but intellectually and emotionally-satisfying life.

I live in a house designed by me. It is built of stone with 18" thick walls that allow tremendous thermal lag-time, so that heating and cooling due to ambient atmospheric temperature is delayed. It is passively cooled in the summer by laying old wet gunny bags on the roof.

The evaporating water from the bags cools the roof and takes away 80% of the thermal load entering the house. Thus, when the temperature outside is about 40-450C, the house is cool with the average temperature of the rooms ranging from 25-300C in the afternoon. The trees surrounding the house also help.

The old gunny sacs are either used as mulch in the garden or burned in our hot water boiler. The boiler is a grate-type multi-fuel boiler with a 10-metre chimney attached to it. The ash from this boiler is used as fertilizer.

All our kitchen waste is fed to our rabbits (about 25-30 of them). These rabbits produce fertilizer (droppings) that makes excellent manure for the garden. All other items inedible for the rabbits, like egg shells or tea waste, are put in the compost pit. After every two or three months, the output from this pit is used as fertilizer.

Our house is on a two-acre plot that has a lot of trees. Their leaf litter rots in the soil during the rainy season and provides mulch. The dead branches of trees provide wood for heating our bath water in the boiler. When we bought this land in 1981, it was completely barren and its quality was poor. Today, the leaf litter and the compost fertilizer have improved the soil quality immensely. The soil is now springy and quite fertile.

Most of our vegetables are grown within 10-15 km from our home. The eggs are from free ranging chickens, milk from cows across the road. We use safflower seed produced in our institute farm for oil. Thus, the oil is fresh and without chemicals.

FOR A BETTER FUTURE

We get most of our groceries and vegetables in cotton carry bags. I usually drive my Maruti 800 car. It gives me between 13-16 km/litre and is small enough to go in the lanes and bylanes of Phaltan. For long distance travel, I use a Maruti Esteem that gives me 18-20 km/litre.

I wear khadi or cotton-spun clothes made in cottage industries. Khadi is a comfortable material to wear and it makes for excellent dusters and wipers later. After they become tattered, they are used in the boiler to heat water. Similarly, all the papers in office are used on both sides. They are then brought home to again heat the water. Thus, everything is recycled.

We use electricity sparingly and this is facilitated by the state government with the 7-8 hours of power cuts every day. We have battery-powered inverters, both in the offices and at home, which supply enough juice for the lights and fans. So the television or refrigerator does not run on them. Power cuts are a good time to read and discuss.

> We work in areas of agriculture, renewable energy, animal husbandry and sustainable development. Since I work on sustainable developmental issues, I try to live sustainably

We do not travel much, but communicate via phones of the Internet. I believe this is a more energy-efficient way of keeping in touch. On an average, we travel only 15,000 km/yr, thus very low energy is used for transport.

We buy only things that are needed. One of our TV sets is 25-30 years old. Most of our gadgets are repaired when they stop working rather than being thrown away.

There is hardly any electricity consumption since we use only fans and CFLs and almost no air conditioning. Our offices also have evaporative roof cooling.

Thus, a very satisfying and decent lifestyle can be maintained using less energy and water as compared to that in western societies. This is a lesson for our leaders who are hell-bent on following the Chinese and US patterns, both of which are consumptive and unsustainable.

(The writer is a recipient of the Jamnalal Bajaj Award and director, Nimbkar Agricultural Research Institute, Phaltan)

Anil Rajvanshi with the model of the proposed Sustainable Development Centre at Phaltan in Satara.

Simplify! Simplify!

American philosopher Henry David Thoreau's timeless message

The mass of men live lives of quiet desperation. What is called resignation is confirmed desperation. But it is a characteristic of wisdom not to do desperate things.

We live meanly, like ants. Our life is frittered away by detail. An honest man has hardly need to count more than his ten fingers, or in extreme cases he may add his ten toes, and lump the rest.

> We live meanly, like ants. Our life is frittered away by detail

Simplicity, simplicity, simplicity! I say, let your affairs be as two or three, and not a hundred or a thousand; instead of a million, count half a dozen, and keep your account on your thumbnail.

Simplify, simplify. Instead of three meals a day, if it be necessary eat but one; instead of a hundred dishes, five; and reduce other things in proportion.

Why should we live with such hurry and waste of life? Let us spend one day as deliberately as Nature, and not be thrown off the track by every nutshell and mosquito's wing that falls on the rails. Let us rise early, and fast or break fast gently and without perturbation; let company come and company go, let the bells ring and the children cry. Why should we knock under and go with the stream? If the bell rings, why run?

Let us settle ourselves, and work and wedge our feet downward through the mud and slush of opinion, and prejudice, and tradition, and delusion, and appearance, till we come to a hard bottom and rocks in place, which we can call reality, and say, This is, and no mistake.

Why should we be in such desperate haste to succeed and in such desperate enterprises? If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music he hears, however measured or far away.

48 hrs of FREEDOM

Pune, on the jazz map now

This time, it's our Pune which has been included in the jazz map of India. A rare treat for jazz enthusiasts in the city, Pune Jazz Utsav will be staged in association with the Pune Jazz Club. Since the 1980s, when it was known as the Jazz Yatra, this festival of music has been one of the highpoints of the cultural calendar in the two cities, viz Mumbai and Delhi.

Pune Jazz Utsav will bring the best of international jazz bands in a three-hour performance comprising three bands reflecting current global music trends. The bands performing are the Jazz Junction, the Adrian D'souza trio and Southern Quartet.

When: Sunday at 6.30 pm

Where: Ishanya Mall, Airport Road, Yerawada

Contact: 66458270/26684916

for ART

Subhash Deshpande, a civil engineering consultant and an interior designer, is passionate about landscape art. His experience has helped him make numerous landscape paintings. His works reflect his love for colours and the freedom he enjoys in interior decoration. Deshpande is also a recipient of the Builders' Association of India's well-built structure Award for McDonald's Restaurant on JM Road. Landscaping and landscape painting are two different subjects, but Deshpande makes them complementary to each other. Without any formal training in art, he surely has a long way to go. His inspirations are experienced artists such as Jayant Khare, Milind Phadke and Milind Mullick. Enjoy a breathtaking display of the picturesque University of Pune campus, chaotic, but lively peths of the city, peaceful beaches, the quietness of Konkan and much more. Deshpande's command over colours, contrasts and perspectives is his forte.

When: From Sunday to January 10, 11 am - 8 pm

Where: First floor, Millennium Plaza, Opp Fergusson College

The Aptara art show showcases the creative talent of a group of graphic artists and designers who work at the company. Most of these artists are professionals and have displayed their works at art shows across India, while others play with the brush out of sheer enjoyment.

When: Saturday and Sunday, 10 am

Where: Art2Day Gallery, near Jagtap Nursery, near Golibar Maidan Chowk, Camp

Contact: 24452706

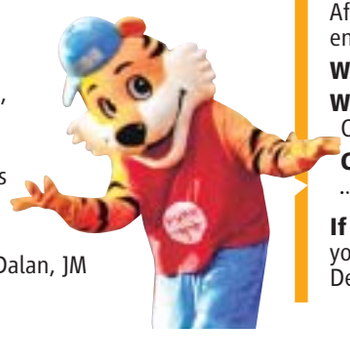
The Bhinna art exhibition displays the works of young artists Rajas, Dhanashree, Nilesh and Avideep. The theme is abstract and the form used is acrylic.

When: Saturday, 9 am to 8 pm

Where: Balgandharva Rangmandir, JM Road

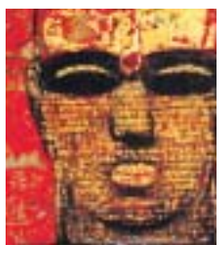
The Photographic Society of Pune is organising a unique retrospective of the third Commonwealth Youth Games, Pune.

Catch Jigrr and other wonderful moments of the Games on camera!



When: Sunday, at 11 am

Where: Balgandharva Kala Dalan, JM Road



An exhibition of new works by artists by Vasudeo Kamath, Gopal Subhedar, Kishor Randiwe, Suresh Choudhary, Vijay Kulkarni, Gautam Mukherjee, Suhas Bahulkar, Sujata Achrekar, Prakash Ghadge

When: Till January 7

Where: Indiaart Gallery, Off SB Road

for MUSIC

Sameep Kulkarni is an international artist who has performed all over the country, and in the US. A software professional, Kulkarni's sitar is his greatest passion. He specialises in Indian classical apart from fusion music, pop, African, Bollywood and rock music.

Sarang Kulkarni learnt the sarod and vocals under the guidance of his guru and his father Pt Rajan Kulkarni. After performing in New York recently, Sarang will present a jugalbandi with Sameep.

When: Saturday at 6.30 pm

Where: Aperture India, 1st Floor, Millennium Plaza, Opp Fergusson College, FC Road

Contact: 66403387

If you thought you knew everything about music, then you must not miss this. Lalit Kala Kendra and the Department of English, University of Pune along with Mansoor Sansmaran Manch has organised a two-day seminar on Aesthetics, History, Society: The case of North Indian Music. A music concert on the occasion of the 100th birthday of renowned classical vocalist Pandit Malikarjun Mansoor will be presented by Manjiri Asnare-Kelkar.

When: Saturday

Where: Garware College Hall, Karve Road

Contact: 25692182

for DANCE

The Battle, a dance competition organised by Rocky Poonawala, is back this year with 60 people competing from the basic to the advance level.

When: Saturday at 7.30 pm

Where: The One, Koregaon Park

for WORKSHOP

A 15-day acting workshop endeavours to explore the creative process of actors. Organised by Swatantra theatre, it is an eye-opener for aspiring actors. The winter workshop comprises voice exercises and theatrical games. It will be conducted by Abhijeet Choudhary and Rakesh Shah.

When: From Sunday to January 15

Where: Shree Mahavir Jain Vidyalay, Boys' Assembly Hall, Next to BMCC, 844, Agarkar Road

Contact: 9370065153, 9923643335

—Compiled by Rituparna Roy

Urban lingo

Recycle

A concept outside America that is used commonly as a slogan among environmentalists, some politicians and the like. Recycling is when someone takes used paper, tin cans, milk jugs and the like to a recycling bin, so they can be crushed down by machines to become new products.

—www.urbandictionary.com

SUDOKU

Download SUDOKU on your mobile for Rs 99 per game. SMS <SDK>to 57575. Only on GPRS WAP enabled mobile sets.

Yesterday's solution

7	1	5	3	8	9	2	8	4
2	8	9	5	4	7	1	6	3
6	3	4	2	8	1	7	9	5
4	2	8	7	9	5	6	3	1
5	9	7	6	1	3	4	2	8
1	6	3	8	2	4	9	5	7
3	7	1	9	5	2	8	4	6
8	5	2	4	7	6	3	1	9
9	4	6	1	3	8	5	7	2

A	I	E	G	F	C	H	D	B
C	D	G	H	I	B	F	A	E
H	F	B	E	A	D	C	I	G
D	H	A	B	E	F	G	C	I
F	E	I	C	H	G	A	B	D
G	B	C	I	D	A	E	H	F
E	A	H	D	G	I	B	F	C
B	G	D	F	C	H	I	E	A
I	C	F	A	B	E	D	G	H

How to play

Fill each of the blank boxes with the number grid from 1-9, and the letter grid from A-I with no letters or numbers repeating in vertical, horizontal rows or 3x 3 grids. Do not repeat any letters in a line. Each puzzle has only one solution.

				8		6		4
3		8			1	5	9	
	5				4			
	3	6	4					
		2				7		
					2	4	3	
			3				5	
	1	3	2			8		9
9		7		6				

	A	G	I					
								G
H			B				E	A
	G			F	H		B	
	F	E				A	C	
	D		A	B			F	
I	H				G			E
E								
					F	D	H	