

## 'Regaining Paradise'

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The title of the \*Book by T Vijayendra is odd or very unusual. 'Paradise' was invented by dreamers and believers. There is no such thing here on earth or anywhere else. Nevertheless it is a fact that due to the high level pollution of the soil, water ways and atmosphere and global warming this good earth has become a hell. Excessive burning of fossil fuel is one of the major causes. If the use of fossil fuel is restricted or brought down to a minimum level the earth could become a better place—which Vijayendra would call a paradise like situation.

In the introduction, the author touches upon the factors leading to the environmental crisis :

1. The environmental degradation which has now reached a crisis point in the shape of global warming.
2. Peak oil, Peak gas and peaking of several mineral resources. Peaking means that after the particular point has been reached production will only keep falling.
3. The economic crisis which began in the USA with the housing crisis in September, 2007. It culminated in the financial meltdown of September 2008.

The response to peak oil and peak gas is to opt for coal and nuclear energy, supplemented by alternatives like solar, wind, bio-fuel, etc.

Most people are aware of the different aspects of this crisis in a piecemeal manner. Thus for the economic crisis, people seek job security. They hope that these international agreements will manage to tackle global warming. While many oppose coal and nuclear based energy sources, they all hope that either alternative like solar, wind etc. will happen or some new technological innovation will solve the entire problem.

Vijayendra claims that his book addresses these issues in a different manner and observes : "One cannot rule out the possibility that this approach is wrong; that any of the above approaches may prove right; or that, the future being unpredictable, problems may be addressed in an altogether new manner."

All the same, based on study and concern for the future, this book outlines a different approach. First, in the opinion of the author this is the most unprecedented crisis in human history.

There are two kinds of challenges involved. Society cannot go back in time from its modern or present sensibilities. The challenge is how to have a modern society with reduced energy. A fossil fuel free society implies a drastic reduction of available energy use for mankind. It makes the present social system of capitalism unviable; not implying people go back to Stone Age!

The objective of the book is primarily to provide educational material for activists and non professionals.

The book is in three parts and 11 Chapters followed by a couple of appendices. Part I is titled 'Wolf at the Door', 'the imminent crisis of capitalism' and the first chapter is captioned 'The Party is over'. The author says that the bell is already tolling and "it is imperative that capitalism should collapse within 10 years or so, so that life on earth has a chance to survive".

This observation looks like wishful thinking.

Commenting on the politico-economic oil situation Vijayendra says : "The oil-producing countries in West Asia are using more oil to spend their income from rising oil prices. Finally, the wars being waged primarily to gain control over oil resources –like the Iraq war—are not only consuming more oil but are also proving counterproductive".

Peak Oil crisis starts with rise in petroleum prices. For some time the figure of USD 100 per barrel of crude has been considered to be the turning point. On November 21, 2007 oil price hit USD 99. In 2008 it reached USD 147 ushering in an economic crisis—a recession in North America, Europe and Japan. Many believe that in the USA the economic crisis started with the housing crisis in August 2007. This economic crisis, is actually leading to a worldwide collapse of the system.

This observation is not borne out by facts. The oil prices came down to US \$40 later on—now in April, 2010 it is hovering around US \$80. The US and European Economies also look like on the road to recovery. The system is unlikely to collapse.

Chapter 2 is titled 'What About Alternative Forms of Energy'.

Vijayendra presents a very useful table on Energy Returned on Investment (EROI) values of Oil and Gas, Coal, Biofuel, Solar, Hydropower, Nuclear.

About Nuclear power the author's views are :

"...in all the countries that have weapon programmes, hidden or potential—nuclear power stations have been built as a civilian front for the weapon programme".

"India's nuclear programme, including the deal with the US is problematic. It seems that it will give India the energy at enormous costs and may not give the weapons. Unlike Japan, India cannot afford it. The programme essentially bails out the nuclear power plant industry in the US, France, Russia, their Indian collaborators like the BHEL, and helps the building industry. Even then, its prospect of adding to India's power generation is negligible because the plants have a gestation of 15 years and they end up only replacing old plants which will then be ready for decommissioning".

On Bio fuel the author observes : "The irresponsible growing of bio crops can do tremendous harm. The rise in production of Palm oil for bio diesel could turn out to be catastrophic threatening to put more carbon-di-oxide into the atmosphere than it could save".

Nor is hydroelectricity as good as it is believed to be : "Today many studies are available which prove that the harm done by dams far exceeds their benefits. The actual performances of most dams are far below their designed capacities".

Part II of the book is titled "Where do we want to go?"

"What will be the alternative vision for a post industrial/capital society? The dominant alternative in the 20th century was Marxism. Today it probably will be a synthesis of Marxist and Anarchist visions enriched by ecological, feminist, regional, ethnic and host of contemporary people's movement. The technological basis for such a society will be based on mainly harvesting the Sun's energy biologically. Today Cuba provides a living example of the transition to such a society."

Chapter 3 is titled "The vision for a fossil free society" :

The author raises a question—"What would Fossil Free Society Look like?"

His own answer is "it is of course difficult to predict the future. We can only have dreams and visions about it."

Then he gives a few non-negotiable guidelines. Which are part of his dream and some wishful thinking.

In the Appendix to this chapter readers are introduced to some visionaries: Thoreau, Kropotkin, Tolstoy, Gandhi, Albert Howard, Fukuoka, Schumacher and Patrick Geddes.

Chapter 4 is titled "Negative Entropy and sustainability technology choice for fossil free society."

Entropy—the Second Law of Thermodynamics holds that with every transfer of energy event there is always some amount of energy that is transformed into unusable or unavailable form of energy. All engines work on this principle.

Plants are cited as examples for negative entropy since they are able to convert solar energy into usable form of energy during photosynthesis.

India and China were practising sustainability in agriculture till they started using chemical fertilisers and pesticides.

### **CUBA WITHOUT ISMS**

From its independence in 1959 till 1989 Cuba was getting its Petroleum from Soviet Union. In return it was exporting sugar and citrus fruits. With the collapse of Soviet Union in 1989, Cuba's trade collapsed so also its economy faced a crisis—since its source of petroleum dried up.

But Cuba weathered the storm by resorting to organic farming and restricting the use of fossil fuel to the minimum. The author presumes that Cuba is capable of achieving fossil free society—subject to some ifs and buts.

"A fossil free India would consist of about a hundred or so federated units, so delineated, on the basis of language and biogeography. There is an interesting discussion about Natural language and standard languages."

Since 1984, all the parliamentary parties have abandoned the poor. In 1984, in Bhopal, during the biggest industrial accident in the world, except for SUCI (Socialist Unity Centre of India), none of the parties were on the side of the people. From the 90s, with the advent of liberalisation, privatisation and globalisation, the parliamentary political parties have been brazenly opposed to the poor, displacing them in millions from their homes and resources in the name of development.

Naxalites have helped to raise the wages of the poorest people e.g. tendu leaf collectors, beedi makers, miners etc. They also protected the poor from oppression, rape, humiliation, bonded labour etc... But the Naxalites fail to address adequately important contemporary issues like gender and caste discrimination, communalism, ecology, climate change and energy.

There is an interesting observation—"The trade union movement world over has got either corrupted with the union bosses acting like capitalists—or has been so politicised, that it no longer represents workers' or society's interests."

There are two-appendices. First one is on the Quaker Method.

"The Quaker method is a very good guide. However, real life always demands adaptations and practicality. If undertaken from a position of standing on good principles the end result is generally closer to the model".

The second appendix is titled "Village of the water Mills" and presents eighth episode of Akira Kurosawa's award winning film 'Dreams'.

Vijayendra's book reminds one of Jeffrey Sachs Books 'End of Poverty' (by 2025) and 'Commonwealth Economic for a Crowded Planet'. On the latter work, Reviewer of the Journal *Economist* had observed :

"If everyone in the world were as reasonable as Mr Sachs, his solutions would be easy to implement. However, if everyone were that reasonable, there would not be so many problems in the first place". □□□

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\*REGAINING PARADISE

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