

Eternal Bhoomi

Ecological Wisdom | Social Justice | Holistic Thinking | Positive Action

BANGALORE

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Transitions



Unconditional Empathy
Transition Stories

Globalisation and Terrorism
Gluten Free Recipes

"If I can't make it through one door, I'll go through another door- or I'll make a door. Something terrific will come no matter how dark the present."

- Rabindranath Tagore

"We are made wise not by the recollection of our past but by the responsibility for our future."

- George Bernard Shaw

"I dont know how to save the world.

I dont have the answers or The Answer.

I hold no secret knowledge as to how to fix the mistakes of generations past and present.

I only know that without compassion and respect for all of Earth's inhabitants,

none of us will survive - nor will we deserve to."

- Leonard Peltier, Native American Activist



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Transitions that Empower

A defining characteristic of modern civilization seems to be the disempowerment of most people. Farmer suicides, apathetic citizens unable to take care of their waste, water and air, the desperation of students to get into colleges and jobs and their inability to find their own livelihoods, the grabbing of land by the land and industry mafia - these are all signs for us to see. And in a global and massive way we feel helpless about the free fall to disaster that our economic system and climate change are leading us to.

The heartening side of the disempowerment is that it is waking people up – many communities are emerging that do not want to leave their lives entirely to governments and big corporates. The ecological and social transitions that people are beginning to seek are about re-empowering themselves also.

The transition movement, therefore is an idea whose time has come. Transitions, in the western world have come to mean community led responses to climate change. The idea of transition towns, pioneered by Rob Hopkins is spreading across the UK, Europe, the US and many other countries. There are over a thousand towns in the 'Transition Network', where the focus is on communities working together, envisioning the changes they need and implementing changes along with local agencies and institutions.

In India, our small towns still have fairly low-carbon lifestyles! However, all over the country, as elsewhere in the world, we have innumerable heroes of the new age, working for transitions towards organic farming, chemical free food, transitions for greater social equity, and generally, for a greener world. We have been presenting many of these stories of positive action in the Bhoomi magazine – from Kutumbakam and Hiware Bazaar to the Deccan Development Society and Ekta Parishad.

We see that a common thread running through the stories of transition happening across the country is that they aim very strongly at empowerment along with ecological living. Over 70 % of our population living in rural areas are engaged in farming, crafts and other rural livelihoods. This includes the most disempowered people in the country. Hence, movements and projects, be it building tanks in Rajasthan or farmers taking up organic farming in Sikkim have been successful because they have also empowered people to take their wellbeing into their own hands.

In cities and small towns too, there is a sense of empowerment in groups and small communities taking responsibility into their own hands for water and waste management, for participating in governance and resisting the corporate take-over of food and personal health.

What we need to be aware of in cities, schools and colleges is that this phenomenon of transition towards empowerment and ecological living is perhaps the most significant changes of our times.

Are our children aware of these realities? Do they know what has happened to our food and health systems? Do they realize how an out-dated, mind-deadening education system is coming in the way of their being in touch with the real world around them? Are they able to see ground realities of stories of hope rather than only read about grim issues like climate change?

As always, the Eternal Bhoomi hopes to fill the gaps in learning and exposure that our future generations face. We do hope that more teachers in schools and colleges share the stories of hope and the perspectives on life today that we present in all issues of our magazine.

Seetha Ananthasivan
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Eternal Bhoomi is committed to bringing you holistic perspectives on Nature and ecological living from renowned writers and thinkers as well as practical ideas and examples of earth conscious living from people around the world.

Transitions

We are experiencing gradual but sure transitions of our civilisation towards an ecologically aware and socially just way of living. It seems to be a trickle now - but all movements start small; Eternal Bhoomi in this issue presents some perspectives and stories of transition.

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on
2nd October 2016
Festival of the Earth

- Celebrate food and the growers of food
- Interact with farmers, craftpersons and eco-pioneers
- Enjoy local, Earth friendly food, music, folk dances

Unconditional Empathy



Photograph by Ananth Somaiah

For **Satish Kumar**, friendship is the organising principle of life.

For the past 10 years I have been going to Mallorca as a guest of my friend Guillem Ferrer. One day he asked me to talk about an ideal that guides all my activities. I said that the most important thing in my life is friendship. All my work is out of friendship. Resurgence & Ecologist magazine is a result of friendship. I have so many good friends who have contributed articles, artwork and money to Resurgence. The Small School has come out of friendship. Schumacher College has grown out of friendship.

Friendship is my primary principle and the bread and butter of my life. I live by friendship. For me friendship is the supreme spiritual quality. Friendship is unconditional – there are no ifs and no buts. There is no reason why somebody is a friend. You don't say: I am your friend because you are this or that. Because you are educated, or rich, or intelligent, or handsome, or you are good to talk to. Such things don't come to your mind. You have a friend because you want to be a friend. Friendship is all about acceptance and without any expectation. You just give, and you just

receive. Friendship is rooted in deep gratitude.

In friendship you say only yes. When a friend asks you out of friendship, you can't say no. There is only yes in friendship. If somebody asks me some help out of friendship, I say yes. And if I ask someone out of friendship, they say yes. My friendship is not only towards humans. I also feel friendship towards Nature. I am a friend of my place and of my garden. I am a friend of trees and flowers. I am a friend of the bees. I am a friend of even the earthworms and the slugs and the snails. The weeds are my

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friends. Friendship is a term people use mostly for human relationships, but I use the term in a broader sense.

My children are my friends. In India we say that when your children become 16 they are no longer your children: they are your friends. ‘Friend’ is a better term than ‘son’ or ‘daughter’, because ‘son’ and ‘daughter’ carry expectations. You expect something from your children. They expect something from you as parents. As friends you don't expect anything. You treat them in a respectful way. It is the same with my wife. She is my friend. My relationship with her is not possessive. Love liberates. There is no bondage and there is no attachment in such marriage.

The village where I live is my friend. So I accept the village as it is. I don't sit in judgement. I love my village. I love its people, its valleys and the trees. I love the natural landscape. I accept them as my friends. I live near the ocean, and so the ocean is my friend. Then the whole Earth is my friend, and the whole world is my friend. Whatever transformation I am trying to bring in my life, in my

society and in the world, I do that with a sense of friendship. The world is beautiful, but within this world we have developed some systems that need to be renewed. My home is my friend, so I clean it, I repair it, and I paint it because after a while my home needs repair and renewal. And my garden needs renewal. In the same way, politics needs renewal. So I work to bring renewal in politics and renewal in economics. It is all out of love.

When my body needs renewing and healing, I try to renew and heal it. The world is my body, and society is my body. They need healing and renewing. So my work is the work of a friendly healer. My work at the Small School is an act of friendship for children. My work for Resurgence & Ecologist magazine is an act of friendship for the readers. My work at Schumacher College is an act of friendship to promote ecology and spirituality in the world. Through meditation, good food and relaxation, I heal my body. When I am run down and tired, I say to my body: slow down, have a siesta. Similarly I say to society: have a siesta, slow down, don't work too fast or too hard. The Buddha said: "If you determine your course with force or speed, you miss the way."

In friendship there are no expectations and no attachment, because expectations and attachment bring disappointment. I live lightly and practise detachment. When I am detached, I can keep moving: I am not stuck, there is no bondage. Detachment brings freedom. All my work is out of profound friendship for people and for the world. I and the world are one. When I am working for the transformation of the world, I am working for the transformation of myself. The greater self. When I expand my consciousness, I become the greater self, the universal self. In this body I am the microcosm of the macrocosm.

So it's out of friendship that I say to Mr Obama: "Look at Mr Putin and see him as a friend, then all your conflicts will be dissolved." I say to Mr Putin: "Treat all Ukrainians as your friends. You are a Christian. What did Jesus say? 'Love your neighbour!'" I say to Mr Netanyahu: "You have been at war with Palestinians for the past 70 years. What have you achieved? Try peace with Palestine for once, and see what happens. Through friendship all pains are healed." I advise Palestinians: "The

When the Buddha was breathing his last breath, Ananda asked him: "How would you like to be reincarnated in your next life?" The Buddha answered: "Not as a prophet, not as a teacher, not even as a person, but as maitreya. I wish to be reincarnated as friendship, as empathy, sympathy and loving kindness."

Jews have been in exile for 2,000 years. Now they have to come home. Welcome them. Together you can turn Palestine into a land of milk and honey."

The best way to have a friend is to be a friend. Friendship is the easy and simple answer to all our agonies, anxieties and anguishes.

In the field of friendship I sow the seeds of love with my hands of humility. I spread the compost of kindness and irrigate the soil of my soul with the water of generosity. I am blessed with the fragrance of joy and the fruits of freedom. I give thanks with deep gratitude for all the gifts of life that I receive every day. It is sweet to be a friend, and it is a blessing to have friends.

With friendship and trust in my heart I walked 8,000 miles around the world without a penny in my pockets. I walked through communist countries, capitalist countries, Muslim countries, Christian countries, and everywhere I was fed, sheltered and loved. If I had gone as an Indian, I would have met a Pakistani or a Russian. If I had gone as a Hindu, I would have met a Muslim or a Christian. But I went as a human being, and I met human beings everywhere. My walk was an act of friendship.

Whether we are a Russian or an American, a Jew or an Arab, a Shia or a Sunni, a communist or a capitalist, whatever the label, we are human beings first and foremost. Our human identity supersedes all other identities. That is why we have to build our personal, political and ecological relationships on the foundation of friendship.

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Friendship is the only glue to hold humanity together. Through the philosophy of friendship we deeply realise that we are all connected, we are all related, we are all interdependent. The entire planet Earth is our home, and we are members of this one Earth community and one human family.

You might call me an idealist. Yes, I am an idealist. What have the realists achieved? Wars? Poverty? Climate change? The realists have ruled the world for far too long and have failed to achieve peace and prosperity for all. So let us give the idealists a chance and let friendship be the organising principle of our world. We may not be 100% successful. We may not achieve utopia, but let us maximise the power of friendship and minimise the force of conflicts. This is worth trying.



***Satish Kumar** has been the guiding spirit behind a number of ecological, spiritual and educational ventures around the world. He is the Editor-in-Chief of Resurgence & Ecologist Magazine and the co-founder of the Schumacher College, U.K. He is also a member of the Panel of Advisors of Bhoomi College.*

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Visit <http://www.resurgence.org> for more

*A new, updated edition of Satish Kumar's book **No Destination: Autobiography of a Pilgrim** has recently been published by Green Books. It is available in the Resurgence online shop.*

Beyond Patriarchy

For the last 5500 years, patriarchy has been an integral characteristic of Western civilization. What does it mean for the destiny of the Earth and the viability of the human species, asks **Thomas Berry**.

Patriarchy, western history and the destiny of the Earth

When the apparent success of the earlier matricentric period is compared with the devastation of the Earth resulting from the civilizational order that followed, we have a comprehensive critique of the Western civilizational process that has probably never been surpassed. We are confronted with a profound reversal of values. The entire course of Western civilization has been vitiated by patriarchy - the aggressive, plundering, male domination of our society.

If we inquire into the driving forces that have evoked this critical re-evaluation of Western civilization, we can identify them as the rising consciousness of women and the devastation of all the basic living forms of the Earth presently taking place in consequence of the male-dominated regimes that have existed during this period. The new mode of ecological consciousness now emerging sees the new period of the Earth community as having a basic nurturing aspect that tends more toward traditional feminine than toward masculine qualities. There are indeed religious, cosmological, biological, and historical reasons for considering the feminine as having a special role in our thinking about the Earth. The term patriarchy has been brought forward as a way of indicating the larger sources of responsibility for what is happening not only with women, but also with the total civilizational structure of our society and even with the planet itself. The sense of patriarchy has now evolved as the archetypal pattern of oppressive governance by men with little regard for the well-being or personal fulfilment of women, for the more significant human values, or for the destiny of the Earth itself.

The human society is nonviable in its present mode of patriarchy

As we look back on the Western historical process, we can identify four patriarchal establishments that have

been in control of Western history over the centuries. However benign our view of these establishments or however brilliant in some of their achievements, we must observe that they have become progressively virulent in their destructive powers, until presently they are bringing about the closing down of all the basic life systems of the planet.

These four establishments are: the classical empires, the ecclesiastical establishment, the nation-state, and the modern corporation. The four are exclusively male-dominated and primarily for fulfilment in terms of the human as envisaged by men. Women had minimal if any consistent role in the direction of these establishments.

First patriarchal establishment: classical empires

These empires had their precedent in the sacred rulers that appeared in Sumeria and in Egypt some 5000 years ago. They were identified by Karl Wittfogel as "the harshest expression of total power". When we look at the grandeur of these civilizations and at their successors in Assyria and

Babylonia, we can only wonder at so much oppression coexisting with such stupendous achievements....In terms of fully organized political rule over a diverse association of peoples, the earliest of the empires was the Persian empire under Cyrus in the sixth century BC. Then came the Macedonian empire of Alexander and the Roman Empire in the Western world. In the East came the sequence of Chinese empires...In India the imperial process produced Asoka in the third century BC, one of the most benign of the great rulers of the period.

This sequence of empires was succeeded in the West by the Byzantine empire, the Holy Roman empire in Europe, then the later empires with a dominant presence of the Spanish, the Portuguese, the Dutch, the French and the British - all overseas - while the Russians expanded their empire throughout the Eurasian continent.

The triumphal achievements of imperial personalities were extolled in epic poetry such as the Homeric accounts of the Iliad and the Odyssey and the Aeneid of Virgil...These epic stories became the inspiration of succeeding generations. To doubt these ideals or to fail in enthusiasm for these wars, whether of defence or conquest, would be to doubt not only the human process, but also the divine disposition of the universe.

Second patriarchal establishment: ecclesiastical christianity

The biblical tradition begins with the creation narrative wherein the Earth Mother of the eastern Mediterranean is abandoned in favour of the transcendent Heaven Father. Later the relationship between the human and the divine is constituted in terms of a covenant between a chosen people and a personal transcendent creative Father deity. This becomes the context in which human-divine affairs are worked out over the succeeding centuries. The natural world is no longer the locus of the meeting of the divine and the human. A subtle aversion develops toward the natural world,

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**The entire course of Western civilization has been vitiated by patriarchy
- the aggressive, plundering, male domination of our society.**

a feeling that humans in the depth of their beings do not really belong to the earthly community of life, but to a heavenly community. We are presently in a state of exile from our true country.

In the Bible narrative, woman becomes the instrument for the entry of evil into the world and for the breakdown in human-divine relations. Only in a derivative sense, through their association with men, do women function in the public life of the sacred community. Later, in explanation of the lesser quality of female being, women are seen as biologically the consequence of some lack of vigour in the male component of the conception process, since in its full energy conception should produce a male child. In this context the whole of feminine existence becomes profoundly diminished as a mode of personal being.

Third patriarchal establishment: the nation state

The next patriarchal establishment that needs consideration is the nation-state...The nation-state might be considered the most powerful institution ever invented for organizing human societies. Above all, the concept

of national sovereignty came into being. This concept might be considered a supreme expression of what we are here designating as patriarchy, the aggressive use of power in pursuit of the male values of conquest and dominion... The various Western people have consistently gone to war

The greatest support for the feminist, anti-patriarchal movement can be found in the ecological movement. As regards the ecological integrity of the Earth, the four establishments that we have mentioned all come under condemnation as leading to a non-viable mode of the human and even to a non-viable mode of the Earth in its major life systems. the highest stage of human evolution.

over the past few centuries in defence of national honour and in a vain effort at national security. This has led in turn to citizen armies, to universal conscription for military purposes. Such armies in modern times are an invention of the nation-state...

As with the ancient empires and the ecclesiastical establishment, so now with the nation-state; it was an affair carried out by men and for the ideals of men. Women were without power in the public realm, in its values, or in its functioning. Women functioned in areas withdrawn from the public life of the society: in the home, caring for children, serving men...Women did not participate in the electoral process in the United States until 1920, and in Great Britain until 1928. Even as late as 1987, there were only 2 women in the 100-member U.S. Senate, 24 in the 411-member House of Representatives. The first woman member of the Supreme Court was appointed in 1981. This type of imbalance was no longer acceptable to women, who comprise more than half the population. They were no longer willing to accept such control over their lives or over the public life of the society or over the



Women have had minimal presence, except as needed for service positions. In this regard, over the generations women have consistently been exploited by the various business processes.

integral functioning of the Earth. The feminist movement became a pervasive influence through society.

Fourth patriarchal establishment: the business corporation

The difficulty with our industrial wonderworld is that its products last for a brief period and then forever remain as a trashed and toxic world in which we and all future generations are condemned to live for an indefinite period. Like the illusion of a magician, we are presented with the blissful moment in the use of these inventions, with no indication of their abiding dark aspect. Human productions do not consistently renew themselves in the manner of natural forms.

This is power. The power of men. The power to profoundly disturb the most significant functioning of the Earth. Women have had minimal presence, except as needed for service positions. In this regard, over the generations women have consistently been exploited by the various business processes. In the early days of the textile industry, women were employed as cheap labour that developed into the sweatshop system in the large cities of the East. In various business ventures women did the secretarial work. They were file clerks, typists, waitresses,

cleanup persons. More professional roles were found in nursing, social work, teaching, writing. Some women had brilliant careers in the performance arts: in music and song and dance and drama.

Yet these have not been the positions of power that are needed to alter the larger directions taken by our society. Those positions are still held by men, and for their own purposes. If mitigations have appeared, they have served only to make industrial processes more endurable...the tendency to constantly modify an existing system without changing the basic pattern of its functioning. What is needed is a profound alteration of the pattern itself, not some modification of the pattern. To achieve this, the basic principle of every significant revolution needs to be asserted: rejection of partial solutions....The pain to be endured from the change must be experienced as a lesser pain to that of continuing the present course.

A pathology beyond adequate description or comprehension

The greatest support for the feminist, anti-patriarchal movement can be found in the ecological movement. As regards the ecological integrity of the Earth, the four establishments that

we have mentioned all come under condemnation as leading to a non-viable mode of the human and even to a non-viable mode of the Earth in its major life systems. As Norman Myers has indicated, we are bringing about an "extinction spasm" that is likely to produce "the greatest setback to the abundance and variety of life since the first flickering of life on Earth some four billion years ago." That we should presently be killing off the rain forests at the rate of some fifty acres per minute is an irreversible tragedy. When we consider especially that these rain forests contain fully half the living species of life upon the Earth and that they took some sixty-five million years to attain their present status, this is obviously a pathology beyond adequate description or comprehension. We came into being within the life community through the billions of years that it took to shape a world into which humans could be born. It has been a creative maternal process throughout, with all the violence of the primordial fireball, the supernova explosions, and the volcanic eruptions from within the Earth itself. However terrifying these transition moments, they have consistently been birth moments. We might hope that what we are now experiencing is another birth moment, yet the patriarchal period is too poignant in its past memories and its present realities for us to fully understand what is happening or what will emerge in the years to come. Too much of what we are doing is irreversible. What we can say is that the Earth seems to be rising in defence of herself and her children after this long period of patriarchal dominion.



Thomas Berry was a cultural historian and eco-theologian and author of many books which include *Befriending - The Earth* (with Thomas Clarke), although cosmologist and geologist or—"Earth Scholar"—were his preferred descriptors.

Source text and images from *ecobuddhism* website.

Peak Oil, Transition Towns and Cities of Tomorrow



Photograph by Ananth Somatah

With the fossil fuel era coming to a close, the future calls for a radical and drastic reduction of our energy consumption and the equitable distribution of energy to to all residents of the Earth, **says T.Vijayendra**

Although wide scale use of petroleum and its product has a history of only about 100 years, it has become central to the very existence and functioning of modern societies. The recent oil price rise in India and reaction to it bears ample witness to this. Transport and power are central to modern societies. Moreover, there is always an annual increase in its demand, popularly known as growth. Any decline in its supply threatens the very fabric of this society. 'Peak oil' does exactly this and endangers the collapse of the system.

What exactly is 'Peak Oil'- which is likely to lead to the end of the industrial era? At the present rate of consumption, all available oil will be used up within this century. But peak oil is not about when we run out of oil, but rather, when

the production of oil starts to decline, and this has already happened. While expert opinions differ, most of them seem to agree that it is already behind us and we are witnessing the effects in the global crash of capitalism!

Cities must re-invent themselves

Given the impending energy crisis, cities will not have the necessary energy surplus to sustain themselves. They will not disappear overnight, but will perforce shrink. If such a shrink is not to be chaotic, it is better to plan their shrink from now. Some of the fundamental issues for cities will be:

1. Cities should plan their shrink so that they do not to exceed a population of 5,00,000.
2. Cities should distribute energy

evenly across all its residents to avoid the risk of conflict between various sections of its residents.

3. The difference in the per capita energy consumption of city and rural people should be narrowed significantly.

4. Cities must plan to configure themselves on the future energy source, i.e., solar energy.

5. Cities in developing countries will never have the resources (energy and financial) to complete the transition to becoming cities based on fossil fuels. It is best to abandon the attempt to make that transition right away and begin the transition to becoming solar cities. For example, plans to widen streets, to have a metro, build a new airport, bring more water from distant rivers etc. should be abandoned.

This story, however, must begin with Cuba where many of the initiatives we are talking about took place about two decades ago. When oil supply stopped in 1990, transportation in Cuba ground to a near halt. No cars ran; public conveyance collapsed; and the streets were empty. People walked...A spontaneous decentralized movement to set-up urban farms was born... Food quality and health improved as people had access to a greater variety of fresh fruits and vegetables.

Cities of Tomorrow

Several hundred cities and rural communities all over the world are involved in local changes to meet such a situation. They have been known as ecological villages, transition towns and post carbon cities. In India too many urban initiatives are taking place.

This story, however, must begin with Cuba where many of the initiatives we are talking about took place about two decades ago.

Cuba

Cuba is where “Peak oil” hit in 1989—in an artificial manner—because there was no oil shortage then. The Soviet Union had begun to collapse and Cuba’s petroleum imports dried up. US embargo against Cuba did not permit imports from other sources.

Cuba’s response is an inspiration to the rest of the world. First, a nation-wide call was given to increase food production by restructuring agriculture. It involved converting from conventional large-scale, high input monoculture systems to smaller scale, organic and semi-organic farming systems. The focus was on using low cost and environmentally safe inputs and relocating production closer to consumption centres to cut transport costs.

A spontaneous decentralized movement to set-up urban farms was born. By 1994, more than 8,000 city farms were created in Havana alone. Front lawns of municipal buildings were dug up to grow vegetables. Offices and schools cultivated their own food. Many of the gardeners were retired men. Women played a larger role in agriculture in cities than they did in rural areas. By 1998, an estimated 541,000 tons of food were produced in Havana. Food quality improved as people had access to a greater variety of fresh fruits and vegetables. Some neighbourhoods produced as much as 30% of their food.

When oil supply stopped in 1990,



transportation in Cuba ground to a near halt. No cars ran; public conveyance collapsed; and the streets were empty. People walked. In the early-1990s, Cuba imported 2,00,000 bicycles from China. Trucks were converted to buses by simply welding steps at the back and adding a skeletal frame of rods and a canopy. The concept was refined into the ‘Camellone’ (The Camel), Cuba’s mass transit bus. Built on a long chassis vehicle, it could accommodate 250 persons. For shorter distances cycles and auto rickshaws were used. In smaller towns, horse drawn or even mule drawn ‘cabs’ were used. Car-pooling and ride sharing became common. Designated government officials in yellow uniforms had the right to pull over even government vehicles and seat people in need of transport.

Transition Towns

Transition Towns is a more recent phenomenon. It is a grassroots network of communities that are working to build resilience in response to peak oil, climate destruction, and economic instability. Transition Towns is a brand for these environmental and social movements founded (in part) upon the principles of permaculture, based

originally on Bill Mollison’s seminal book, *Permaculture, a Designers Manual* published in 1988. The Transition Towns brand of permaculture uses David Holmgren’s 2003 book, *Permaculture: Principles and Pathways Beyond Sustainability*. These techniques were included in a student project overseen by permaculture teacher Rob Hopkins at the Kinsale Further Education College in Ireland. Two of his students, Louise Rooney and Catherine Dunne, set about developing the transition towns concept and took the far-reaching step of presenting it to Kinsale Town Council, resulting in the historic decision by councillors to adopt the plan and work towards energy independence. The term transition town was coined by Louise Rooney and Catherine Dunne. The Transition Towns movement is an example of socio-economic localisation.

The idea was adapted and expanded through 2005, 2006 and beyond in Hopkins’ hometown of Totnes, where he is now based. The initiative spread quickly, and as of May 2010, there are over 400 communities recognized as official Transition Towns in the United Kingdom, Ireland, Canada, Australia, New Zealand, the United States, Italy, and Chile. The term transition towns has morphed into transition initiatives to reflect the range and type of communities involved – e.g. villages (Kinsale), neighbourhoods of cities (Portobello, Edinburgh), through council districts (Penwich) to cities and city boroughs (Brixton).

Central to the transition town movement is the idea that a life without oil could in fact be far more enjoyable and fulfilling than the present: “by shifting our mind-set we can actually recognise the coming post-cheap oil era as an opportunity rather than a threat, and design the future low carbon age to be thriving, resilient and abundant-somewhere much better to live than our current alienated consumer culture based on greed, war and the myth of perpetual growth.”

An essential aspect of transition in many places is that the outer work of transition needs to be matched by inner transition. That is in order to move down the energy descent pathways effectively we need to rebuild our relations with our selves, with each other and with the “natural” worlds. That requires focusing on the heart and soul of transition.

A key concept within transition is the idea of a community-visioned, community-designed and community-implemented plan to proactively transition the community away from fossil fuels. The term “community” in this context includes all the key players-local people, local institutions, local agencies and the local council.

As of 2010, transition initiatives are generally including the global financial crisis as a third aspect beside peak oil and climate change. Initially, this has been linked to the creation of a series of local currencies in transition towns including the Totens pound, the Lewes pound, as well as the Brixton pound in London.

Urban India

India has an urban population of 300 million, greater than the population of USA, or for that matter, greater than any country except China. This urban Indian population lives in a total of 400 urban agglomerates. Of this urban population, more than half (180 million) lives in 35 cities that have a population greater than a million. The three metros/ mega cities, Mumbai, Kolkata and Delhi have more than 10 million residents. Hyderabad and Bengaluru, have more than 5 million.

As we have said it is only in the metro and mega cities that restructuring to suit cheap fossil fuel has occurred in a significant way. Road widening, tarred roads, suburbia etc. has occurred in these cities. Here also it is not complete. Pockets of slums - as much as a third of the population living in them, which have small lanes continue to exist. So changes required to face fossil fuel free

societies are far easier in India and in other developing countries than in the developed countries.

On the other hand public awareness on these issues is low and it is not able to influence the governments or even local bodies in terms of policies. So the changes that are occurring are on the basis of acute problems that people are facing due to the present crisis. These are: rain water harvesting, fuel (for cooking) and fuel efficient stoves, urban agriculture for perishable foods like vegetable and fruits which are becoming expensive due to transport costs, transport based on non-fossil fuels - bicycles, cycle rickshaws, horse, donkey, camel and bullock carts. Solid waste management is probably the only area where city wide policy intervention has been possible.

Roof-top rainwater harvesting has been the most widely discussed topic. Many state governments have passed laws making it compulsory and have published booklets to help people how to do it. Organisations like CSE in Delhi train people in it and have also carried out prestigious projects. However in terms of implementation it is still slow. It is the most promising area of activity for creation of green jobs and green entrepreneurship. Rain water harvesting is not limited to roof top alone. It involves tree planting in cities, restoring tank and ponds and in general what is called ‘water shed management’ which can apply to all the areas.

Fuel efficient stoves have been around since the 50s starting with MaganChulha having a chimney and designed for 2 or 3 pots. There are others, which produce charcoal as a by-product or are based purely on charcoal as a fuel and finally there are solar box cookers. The problem is that they are a bit expensive and require knowledge and maintenance. People who can afford have other alternatives like gas or servants to cook for them. The real answer is to increase equality in society and have plentiful fuel wood

by planting fuel wood trees. Charcoal produced from wood should become the main high density fuel for artisan/ industrial use.

Urban garden movement too is catching up with relatively modern and affluent urban people who are becoming aware about health food. They mainly produce vegetables. There are e-groups, training programmes and books in most big cities. Several cities have started marketing local and organic products. Bangalore and Hyderabad have fairly well established shops which also couple network places for kitchen gardens. Poor people, on the other hand, do manage to grow whatever is possible. In smaller town where there is a bit more space and people are more linked to rural hinterland, this happens much more.

Bicycles and cycle rickshaws are making a genuine come back and a large number of towns are seeing not only revival, but also better equipment and better social organisations. On the other hand city planners are still governed by fossil fuel lobby and the convenience of private cars dominates. However some towns do have cycle lanes. Nanded in Maharashtra has lanes for cycle in several streets.

In Vellore, a zero waste management programme has been successfully carried out. Several municipalities all over the country are trying it out. This coupled with anti-plastic movement is slowly changing the face of urban India.



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He has also written booklets on occupational health issues of textile and coal workers and on how to run hobby bookshops (in Hindi and Telugu). He may be reached at t.vijayendra@gmail.com

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“Transition Towns is the only ethically defensible thing to do”

Rob Hopkins speaks to **Alex Blackburne** about his project’s meteoric success.

Launched in 2005 in Totnes, Devon, in response to environmental and economic pressures, offshoot initiatives initially spread elsewhere in the UK. Now, there are Transition Towns in communities across the US, Canada, Australia, South Africa, New Zealand, Brazil and more.

The man behind it all is Rob Hopkins, and he spoke to Alex Blackburne about his project’s meteoric success.

What is the Transition Network?

It’s really an approach which is about what a community-led response to climate change, the end of the age of cheap energy and the economic crisis looks like. It’s founded on the idea of community resilience, making the places that we live in more resilient to shock and change, and seeing that as a historic opportunity for entrepreneurship, fresh-thinking and creativity.

Where did the idea come from?

It started in Totnes, and we started an exploration into what a community-led approach would look like, and then it just took off – much to our surprise. We started getting people around the UK picking it up, and then further afield, and there’s now not a week that goes by

we don’t say, “Look what they’re doing in South Africa!” or wherever.

The world is on the verge of giving up the idea that we can actually do anything about climate change, and that’s what drives me

The original idea was to see how we could create some kind of self-organising approach. It wasn’t designed to be like a Coca-Cola franchise; it was designed to be something that people anywhere in the world would pick up. There was enough shape to it that it felt like it was a recognisable, distinct thing, but at the same time there was enough freedom and flexibility for them to make it their own.

For example, the Transition

American anthropologist Margaret Mead’s famous quote about a “small group of thoughtful, committed people” being the only thing that has ever changed the world could have been said about the Transition Towns movement.

movement is just on fire in Brazil, and it doesn’t feel like a UK import; it feels like a Brazilian thing. They’ve developed their own way of teaching it, communicating it and presenting it, and that’s a testament of how we designed it at the beginning.

Do you have a clear idea of what a low-carbon economy looks like?

It’s becoming much clearer. When we started, we always framed Transition as being an experiment – and something that we’d only figure out if enough people in enough different places have a go at it, and we could pool that learning and that knowledge. But I think now, we have a sense that it’s in part about shifting the focus from inward investment to internal investment, and getting communities to invest in themselves.

That’s one of the things that comes through very strongly in the new book. We’re looking at a model that is going to be focused on localisation, and the things that make sense to do. It’s going to be based on resilience and looking at how the things that we do and the businesses that are put in place contribute to that.

They're going to be low-carbon and they're going to recognise that we live in a world of limits; not of infinite resource possibilities. They're going to be about bringing resources to community ownership. And often, they're going to be enterprises that serve a wider social purpose – rather than just for profit. Those models are really exciting.

What's the reaction been like within communities that are now Transition Towns?

Even the most successful Transition projects wouldn't claim every single person in that community thinks it's fantastic and is on board, and I think sometimes feel that unless you get to that stage, you can't really do much that is of any use. But actually, there's a huge amount you can do.

Resilience is the vital missing part from discussions about sustainability often in the more overtly green world, people don't have such an awareness about how some things tend to exclude a lot of people. Something like Transition, which is very much about working at a local level to try and build a coalition of different organisations towards community resilience, can't be seen as on the left or the right.

How does resilience relate to sustainability?

Resilience is the vital missing part from discussions about sustainability. Sustainability is generally always a good thing, whereas you can have a very resilient place that is not necessarily good in other ways. But what sustainability doesn't design in is the ability to withstand and adapt to shock.

Sustainability tends to imply a kind of steady state; that you reach a place everything can kind of chug along on a sustainable level. Whether it's because of climate change, our continued dependence on undependable energy sources or the financial crisis, we seem to be entering a time where the possibilities of shocks are increasing.

What are your personal motivations for doing what you do?

Because I can't see any other ethically defensible thing to be doing at this moment in history. I have four sons, and I feel committed to being able to look them in the eyes in 20 years' time and tell them that I did all I could during the time when there was still things that could be done.

I was talking recently to a colleague in the US who works for an organisation that funds a lot of climate work. She said that the people she meets at the UN and the US government are giving it 18 more months, and then all the funding that is currently going into mitigation will be moved into adaptation and defence. That's the point that we're at.

The world is on the verge of giving up the idea that we can actually do anything about climate change, and that's what drives me. This little window of opportunity will never happen again, and we need to be doing whatever we can to be trying to do something about that.

Are you optimistic?

It looks pretty much certain now that we're going to go past 2C of warming. I can't see much of a way that that's not going to happen because we're so nearly there and emissions are increasing if anything. I suppose it's really about whether we can avoid more warming in a very complex system where there are lots of uncertainties. I always go back to what Paul Hawken said when he was asked whether he was an optimist or a pessimist. He said if you read the climate science and you're not a pessimist, you haven't read it properly, and if you've looked at what people around the world are doing in response to climate change and you're not an optimist, you haven't got a heart.

There are no guarantees with any of this. I don't know whether we can make it or not. But it certainly feels like we have to do whatever we can.

Transition Network is an approach which is about what a community-led response to climate change, the end of the age of cheap energy and the economic crisis looks like. It's founded on the idea of community resilience, making the places that we live in more resilient to shock and change, and seeing that as a historic opportunity for entrepreneurship, fresh-thinking and creativity.



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The Sharing Economy: Capitalism's Last Stand?



Is the sharing economy the first part of a New Economic Paradigm or is it capitalism's latest trick to survive at all costs? **Arthur De Grave** shares his views.

Access over ownership. After decades of excessive consumerism, this prospect sounded revolutionary. At first. Now that the sharing economy has become mainstream, more critical voices are appearing. So, what will it be? Empowerment or exploitation? A revolution or business as usual?

Before getting to the heart of the matter, I'd like to set something straight: the collaborative economy and sharing economy (or collaborative consumption) are not the same concept. The sharing economy is just one part of the collaborative economy, as is distributed production, P2P (peer-to-peer) finance and the open source and knowledge movements.

What these phenomena have in common is their reliance on horizontal networks and distributed power within communities, as opposed to the competition between hierarchical organisations that has dominated economic life since the second industrial revolution. For a number of reasons, I believe this old economic framework is rapidly becoming obsolete. A new

economic paradigm is needed, and this could be the collaborative economy.

But still, there are several contradictions in the collaborative economy that are currently becoming most obvious in the sharing economy as it goes mainstream. Let's take a closer look at what these are. And guess what? They have something to do with inequality.

An economy where people value access over ownership? It sounds literally revolutionary. Karl Marx would be thrilled. Indeed, if you look at it closely, it is the exact opposite of capitalism, a system that encourages people to accumulate more wealth and goods than they could possibly use & "put it to work for them".

Empowerment in an era of growing inequalities

An economy where people value access over ownership? It sounds — literally — revolutionary. Karl Marx would be thrilled. Indeed, if you look at it closely, it is the exact opposite of capitalism, a system that encourages people to accumulate more wealth and goods than they could possibly use and "put it to work for them".

"Sharing" on the other hand, is a nice sounding word and the expression of pure morality, the exact opposite of homo economicus' iconic egotism. So, after having believed for centuries that man is wolf to man and having built entire political and economic systems upon this very assumption, it may turn out that we were wrong after all, and that humans are pure, altruistic beings. Right.

Why, then, all this growing discontent towards the so-called sharing economy? Two main groups of criticism have emerged: one on ownership structures and the other on

employment. These two matters are of course related if one is to consider the context in which the sharing economy was born.

We are living in the post-2008 world, a time when we are not completely sure that capitalism will be able to once more reinvent itself.

What is the most obvious characteristic of our current economic era? Growing economic inequalities (if you doubt that, I recommend you read Piketty's *Capital in the Twenty First Century*), fueled both by patrimonial inequalities (capital ownership) and income inequalities (jobs). Capital distribution is roughly at its pre-WWI levels, which means the 1 percent are doing pretty well. Such levels of inequality might eventually drive our civilization to collapse.

Even Eric Schmidt — the chairman of a company whose private buses are being thrown rocks at by angry impoverished locals in San Francisco — thinks inequality will be number one issue for democracies in the future. And even the rich and powerful of the world that gathered at the World Economic Forum in Davos — not exactly a group of dangerous leftists — are worried about the growing gap between rich and poor!

So, are we to take the sharing economy seriously? If we want to assess whether it should be seen as the first part of a new economic paradigm or as capitalism's latest trick to survive at all costs, we have to analyze its likely effects on inequality.

Should you really free yourself from all earthly possessions?

From a collective standpoint, it might well be better to have access to a resource rather than owning it. Compared to the baby boomers generation's obsession with hoarding, maybe younger generations indeed show less of an urge to possess things (but of course, they also cannot afford it anymore).

But if someone asks you to free yourself from all earthly possessions, you should always ask: if it's not mine, then who owns it? Remember that for Aufklärung thinkers, private property was perceived as something inherently positive: a safeguard against greater forms of oppression. Back in medieval times, serfs did not own the land they

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were working on. In Antiquity, slaves did not even own themselves, for that matter. Sometimes, owning is a way not to be owned! It is quite normal that we are witnessing the beginning of a backlash towards the sharing economy: after all, it mostly consists of venture capitalist-backed startups, old-fashioned centralized ownership structures. When I was sitting on the bench at business school, I was told one thing: the purpose of any company is to maximize shareholder value. Employees and customers are but a means to an end, and in general, a good way to maximize return on investment is to get your customers to pay as much as possible (non-price competitiveness) and on the other side to pay your employees as little as possible (price competitiveness).

Simply put, under a modern capitalist mindset, shareholders are not peers (from Latin *par*, "equal"), but overlords. And if your business model is based on your ability to sustain a community, it is not absurd to expect a contradiction between your duty to serve your investors a high return on investment and the egalitarian spirit of P2P services. In the end, you will have to choose one or the other.

Sharing: crowd-sourcing taken to the next level?

This point is the most controversial of all. Sharing economy services could accelerate the phenomenon of job destruction. For people like Evgeny Morozov, the so-called sharing economy is nothing but the logical continuation of the digital economy and crowdsourcing. Despite all those nice speeches about empowerment

and entrepreneurship, people in the sharing economy are nothing but an extreme precariat (they just don't know it yet). And they may actually have a point. Do you remember the last time the economic system went haywire? It was in the early 70s, when the oil price suddenly rose. This is what happened:

Real wages started stagnating while productivity per capita continued to increase. To keep the system running, a new deal had to be made: people would no longer be paid according to the value they actually produced, but they would get — seemingly — unlimited access to credit. This new deal had a name: debt. In the post-2008 world, we all know this deal is now null and void.

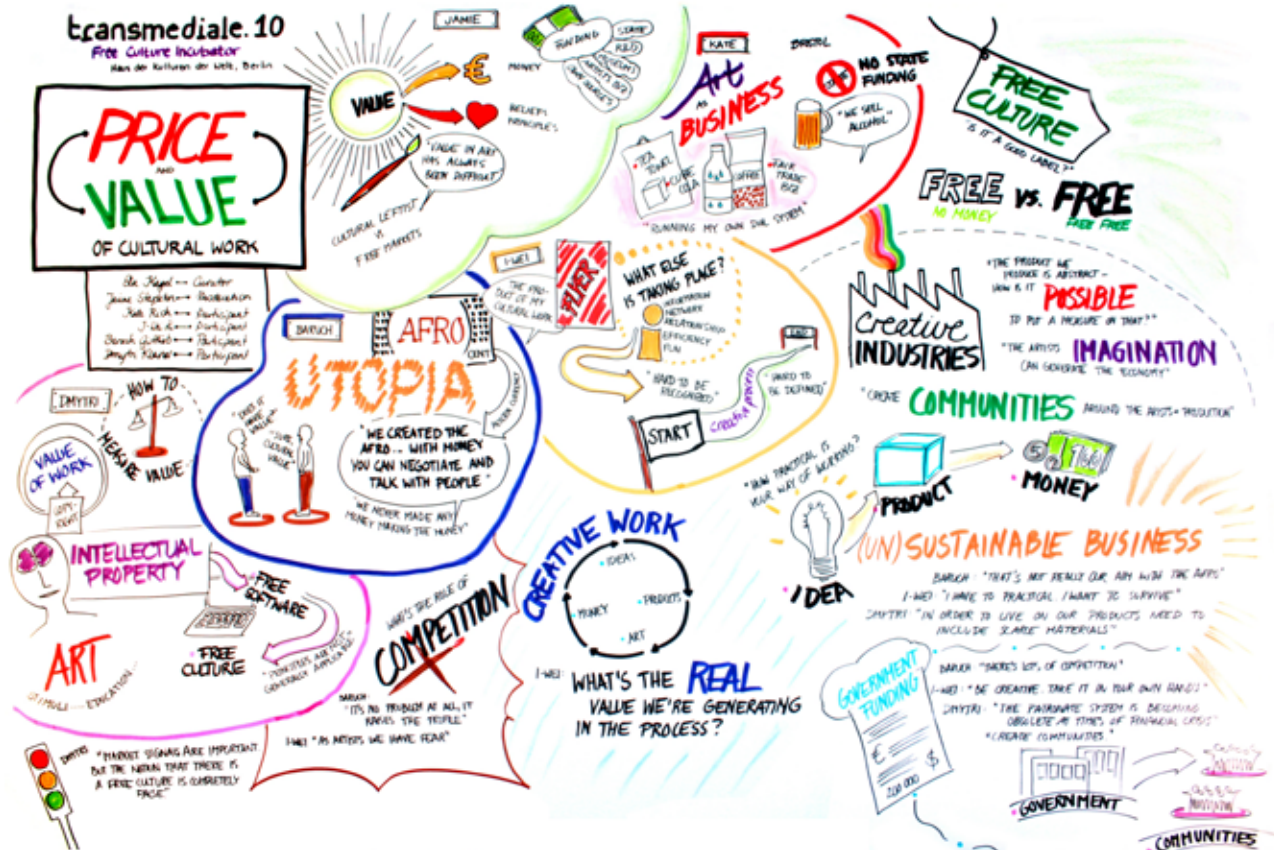
So, what do we do now? If someone tells you he knows for certain, chances are high he is lying.

One cannot help but notice one interesting fact: while allowing wages to stagnate and inequalities to skyrocket, the neo-liberal revolution has left the basic structures of welfare — all those perks associated to wage labor such as social security and healthcare — relatively untouched. These are precisely the benefits Lyft drivers or Airbnb hosts will never have: they are not employees. In a way, these services are based on crowdsourced solutions. Is the sharing economy truly about that? As Morozov puts it, does the sharing economy "undermine the workers' rights"? Most probably. Will it destroy jobs? Of course it will! But to be honest, computers and robots will soon replace most human labor anyway. Wage labor cannot be saved, and rather than fighting long-lost battles, people should start thinking seriously about solutions such as Universal Basic Income.

After reading this, you are probably convinced that the sharing economy is nothing but capitalism's latest and sexiest outfit that will not solve, but worsen our inequality issues. But guess what? You might be wrong.

"The owl of Minerva spreads its wings only with the falling of the dusk" (Hegel)

It is impossible to understand the meaning of something before it is over. And at dusk, it is hard to tell dogs — man's best friends — from wolves. Considering the economic cycle which started in the early 70s and ended in 2008, the sharing economy may be the



“If you think it’s just about winning in the collaborative economy, and that “sharing is the new buying”, you should probably think again.” If that is your main concern, you should probably stop talking about communities and peers. If the collaborative economy cannot help you solve our growing inequality problem, it should be of no interest to you.

next monster born out of Reaganian economics. But let’s not forget that dated intellectual frameworks usually fail to predict the future. We are at dusk, remember? Old ways of thinking do not shed enough light on current economic and social problems.

What happens next, no one can tell. Are Silicon Valley venture capitalists currently being fooled into creating the embryo of a P2P economic paradigm, in which they will lose most of their influence? Or are the enthusiasts talking about empowerment being tricked into creating a new kind of serfdom?

There is absolutely no way to know. In such cases, ancient Skeptic philosophers had an interesting way of proceeding: epoché, suspension of judgment.

If you cannot predict something with a reasonable amount of certainty, stop arguing endlessly about it and start acting towards the outcome you would like to see.

What do we do next?

It would then be dishonest from an intellectual standpoint to give this long

article any kind of conclusion (epoché!). Instead, I will make two — in my own humble opinion — important remarks.

First, we should avoid using the concept of a “sharing economy” as much as possible: it is tricky and raises the bar too high. It leads people to expect too much from new business models and their users. Of course it’s not really about sharing! Don’t expect any kind of moral revolution (historically, revolutions that want to change human nature end up badly). There is no such thing as pure altruism (come on, even early Christians who happily ran into the lion’s den seeking martyrdom thought their sacrifice would eventually be repaid a thousand times!). Men are both altruistic and egoistic, and that’s perfectly fine.

That being said, “If you think it’s just about winning in the collaborative economy, and that “sharing is the new buying”, you should probably think again.” Will big companies be able to face new competition from startups and win over new customers? If that is your main concern, you should probably stop talking about communities and

peers. If the collaborative economy cannot help you solve our growing inequality problem, it should be of no interest to you. It’s not about protecting market share, it’s about building an economic paradigm that can make it to the 22nd century. Things will change no matter what, the only question is: how smoothly?



Arthur De Grave is the core connector and editor of the Ouishare magazine and is based out of Paris, France.

Source text and images courtesy creative commons.

Transition Stories from Rural India

The word 'Transition' has become a buzz word amongst those who are concerned about sustainable living, largely through the concept of Transition Towns which began in the UK and spread to many parts of the west. But "India lives in her villages", as Gandhiji famously said. To look at transitions in rural India is as important as focusing on our cities.

Slowly but surely a few of our villages are transitioning towards more just and sustainable living. Grassroots communities and individuals have transformed villages such as Hiware Bazaar in Maharashtra and Kuthumbakam in Tamil Nadu. We present here a few inspiring stories from other rural areas where there have been significant shifts - in issues ranging from water conservation to sustainable sand mining. These are condensations of stories of alternatives that have been shared on **Vikalp Sangam** and India Water Portal.

Water in the Desert

Gajanand Sharma, who spent 5 years in Delhi working odd jobs, is now considered a "technical engineer" in the villages around Alwar, Rajasthan. "After the rains, the land will be filled with water and then I will sow wheat and reap record production in this area," he prophesizes. This forecast doesn't come from his knowledge of astronomy, but that of geology, gained over the years.



Gajanand Sharma builds an anicut on his farm

In a region that experienced a 40% monsoon deficit last year, the water table has risen to 50 feet, in an area of 160 square kilometres, supporting 20 villages. The combination of Gajanand Sharma's persistence, the community effort to conserve water, following the elders' traditions and a sense of responsibility has led to this marvel, that has also resulted in less corruption and forest conservation.

The work of Gajanand has brought together the various castes and communities in the region. Such efforts have empowered the villagers and has led to proven results and made them self-reliant.

Empowered Women Entrepreneurs

Kode Sujatha is one of the 18 women who run the Undavalli Mutually Aided Cooperative Society, an all-women's collective in charge of dredging, mining, loading and selling sand in Undavalli, a village situated on the banks of the Krishna River that flows through the coastal Guntur District of the state of Andhra Pradesh. Everyday, she and her colleagues deal with angry boatmen who shout for her attention. Sujatha stares hard at them, holds up a piece of paper and says, "If you have a printed receipt of payment, come, stand in the queue. We will pay one by one. Shouting will not help you."

Dealing with a few angry boatmen is not the least of her problems. Powerful 'sand mafias' that operate throughout the state are another force to be reckoned with, as are the lurking threats of environmental degradation and poverty.

But Sujatha is determined to make this enterprise work. Overseeing the sustainable extraction and transportation of sand in this village has been her ticket to a decent wage and a degree of decision-making power over her own life.

She also knows that having women like her in charge of this operation is the best chance of avoiding the environmental catastrophes associated with unregulated sand mining, such as groundwater depletion, erosion of river beds, increased flooding and a loss of biodiversity.

Kode Sujatha directing mining operations at Undavalli



Befriending Insects

Sheila Devi, from Lalitkhera village in Haryana is one of the farmers who have formed a symbiotic relationship with the insects, instead of using pesticides to ward off these organisms. "We had a good harvest and also saved money on pesticides," she says. Under the guidance and training of Dr. Surendar Lal Keet Sakshatra Pathshala, the farmers in Jind district in Haryana have learned to identify and co-exist with more than 200 species of insects.



Women Farmers identifying insects

Rather than labeling insects as enemies and using insect traps, these farmers have taken the route of mutual coexistence. "We can't even see many of these small creatures with our naked eye but still believe that we can control them. It is better to make our peace with them than waging a never-ending war", says Manveer Singh, one of the early adopters of this concept.

For some years now, the popularity of this pest literacy movement has grown to include the Khap Panchayats in the area, who formed a study panel which included a former judge, a food policy expert and the secretary of the farmers' commission. The panel recommended the promotion of insect literacy by the government.

Considering that pesticides are one of the reasons for increasing input cost and hence farm debts, adoption of pesticide-free farming holds a promise of profitable farming as well.



Photograph by Ananth Somaiah

Taking care of their Nourishment

Women in a small village located in Gadchiroli district of Maharashtra have come together to ensure that their family members are getting nutritious food throughout the year, with a ration shop run by them.

What has brought on this welcome change to the otherwise tough existence of Adulwar and her fellow villagers? The transformation began when Ami Amchya Arogyasthi (AAA), a local non-government organisation rolled out a comprehensive intervention aimed at improving the dismal maternal health indicators in 35 villages of Kurkheda and Korchi blocks of Gadchiroli with the support of UK Aid's Global Poverty Action Fund.

The idea was to work closely with the community on two aspects – monitoring the availability of quality healthcare services and access to food under the PDS and Integrated Child Development Services (ICDS).



SHG members in a committee meeting

According to Dr Satish Gogulwar, Chief Functionary, AAA, "Empowering the community to claim their rights and actively monitor essential government services is key to bringing about lasting change. Work on strengthening the PDS services started in November 2013 and by conducting regular meetings and social audits in the village, with the complete participation of locals, including the women, many loopholes in the system were identified. Thereafter, people were encouraged to turn things around."

The SHG members take turns to work at the shop. Each month, two women take charge of distributing the ration – around 25 kilos of rice, 15 kilos of wheat and a kilo or two of sugar per family – and keeping a log of the sales.

Remarks Niranta Jamkata, an SHG member, "There was a time when we had to stand in long lines the whole day to get what was due to us. Now we never make anyone wait." Monitoring PDS disbursement and keeping an account of the money has also done wonders for their confidence.

As in many other examples, this story illustrates the importance of communities taking charge of basics for their wellbeing such as food, nourishment and health.

Chizami Model of Development

Chizami village, located in the Phek district of eastern Nagaland, has 600 households with a population of 3,000. The village comprises six khels, a Naga name for clans within the same community. In the upper reaches of the tropical forest of the village are 'Jhum' fields, for the slash-and-burn cultivation traditionally practised in the hilly terrains of north-east India. In the jhum system, an area is divided into plots and a particular plot is cultivated for a year or two after which the farmer shifts to the next plot. The rotation cycle between plots vary between five to 10 years. The longer the duration, the better the crop yields as the soil gets more time to replenish with nutrients.

Chizami is considered a model village for the quiet revolution it has led in the past decade in terms of socio-economic reforms and environment protection. A signage at the entry point of the village sternly prohibits hunting and trapping of birds and animals. The village council imposes strict fines on those violating norms. In fact, the village celebrated Chizami Day on 8 January 2015 for the first time with the theme—"Recognizing history, celebrating the present, and inspiring the future".



Women's rights group promote sustainable agriculture

"Climate change and erratic rainfall is affecting our agriculture. As a result, farmers are shifting from cultivating food crops to horticulture and other cash crops. In this context, we need to look for answers within our traditional agriculture practices, which can be regarded as sustainable and ensures food security for the community," observes Seno Tshuhah, the Project team leader, North East Network (NEN), a women's rights organization that promotes sustainable agriculture and agro-diversity in Chizami.

"Without the jhum fields, we cannot think of having diverse vegetables and wholesome food. By producing only for gain in the market, we are losing the essence of sharing that has been passed on from generations in our community. Today, young men are least interested in farming, leaving the women to work in the fields. There are now very few households where both husband and wife work together in the field," says Wekoweu Tshuhah, the programme manager.

Protecting the Forest Deity

At a time when incidences of fire have reduced invaluable forest wealth to ashes across Odisha due to soaring temperature since March this year, forests around villages in Mayurbhanj and Kandhamal districts have surprisingly remained unaffected so far.

What these villages have been successful in doing is that they have taken up the task of checking the spread of forest fires in their districts.

"Forests house our living deities. They are found in forms of plants, rocks and animals. If forests catch fire, it is we who will be the biggest losers. Moreover, the forest is the biggest source of our livelihood and food. We always wish that forests remain intact," said Maheswar Naik, president of Conservation and Management Committee formed under the CFR, Balipaka village in Mayurbhanj district.

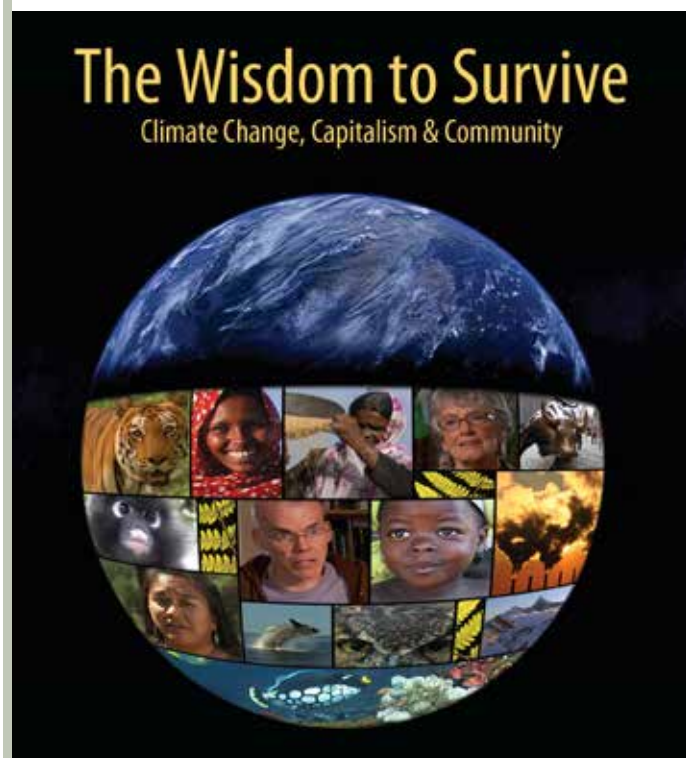


This initiative of the villagers is clear evidence that the Government and its Forest Department by themselves cannot manage issues in large and complex forest eco-systems the way that villagers who are closely connected with it can.

The residents of Balipaka village inside Similipal National Park have constituted two teams to keep a tab on forest fire. "As soon as anyone notices smoke in a forest, other villagers are immediately alerted. The squad rushes to the spot. Subsequently, a fire line is drawn between the affected and unaffected area to prevent its spread," Mr. Naik said.



Compiled by **Akshay Swaroop**. Source material and images from **Vikalp Sangam** and **India Water Portal**. (www.vikalpsangam.com and India Water Portal.com)



**- A Film by Old Dog Documentaries
reviewed by Frederic and Mary Ann Brussat**

"If you want an adventure, what a time to choose to be alive — to get a chance to find out what you have inside you in terms of vitality and alertness and courage — what you have to discover in terms of what we can do together. . . . You are born into this. And you are here to love it and see that it goes on."

Joanna Macy

The Wisdom to Survive offers the most inspiring, enlightening, creative, and practical overview of the spiritual dimensions of climate change that we've seen. With rare clarity and depth of insight it reveals the challenges and the new possibilities that this ever-expanding tragedy bestows upon the sons and daughters of God. We are called to be co-creators and caretakers of the good Earth. All the major religions advise us to do no harm, to mend the bent and broken world, and to love our neighbors — humans, animals, plants, waters, soil and rocks — as ourselves. To do so, we are going to have to face climate change and all its ramifications.

We love it that this social issue documentary by John Ankele and Anne Macksoud begins with a salute to the beauty of all creation and ends with the bold words of Joanna Macy quoted above. The filmmakers know in their hearts that there is a deep connection between creativity and sacred activism to save the planet. That is why they have included poems by Wendell Berry and Rainer Maria Rilke in this 56-minute documentary.

Amy Seidl, an evolutionary biologist, notes: "Climate change is no longer a consequence of our industrialization; it is a crime against humanity." Biologist Roger Payne gives us specific examples: the slaughter of whales, the effect of water shortages on large groups of people, the melting of glaciers, the destruction of coral reefs, and the threat to

the ocean plankton at the base of the oceanic food chain on which billions of people depend for protein. What we need, he adds, is a new story because the present one — the Earth was made for us and we can do what we want with it — is killing us.

James Gustave Speth, an environmental lawyer and advocate, points out that our political leaders have not only dropped the ball on this, they have hidden the ball. Capitalism, with its focus on profits and progress and greed, has failed us.

Biologist and Buddhist practitioner Stephanie Kaza talks about the importance of not turning away from the suffering caused by climate change. Only by being with what really is will we see the opportunities for our own action. From a Chinese scroll painting, she pulls a lesson about the "deep view" of the interdependence of all life and the imagination as the path to new possibilities.

The filmmakers hurrah the energy and curiosity of kids and the creativity of youth who are stirring things up with permaculture, alternative fuel options, and city gardens. They focus on the commitment to protect Mother Earth evident in Native American movements to protect their water rights. From activists in South Africa and India, we learn about the food justice movement and the importance of women farmers.

Bill McKibben, a religion writer, acknowledges that climate change is a complex problem because it is global and influenced by economics and politics. He hopes we can make the politics change as fast as the physics and chemistry are changing. He concludes: "I think we have a chance. The game is not yet over and the outcome is not yet clear. But it isn't going to happen automatically. The only hope is to build a big movement." McKibben's organization 350.org is the organizer of the People's Climate Change March that took place in New York City in September 2014. It is an example of how movements are converging: the environmental movement, the food justice and the women's movement, the LGBTQ and the animal rights movement, the conscious eldering and interfaith movement, and many others.

And we end where we began — with beauty: Here is a final thought from McKibben:

"I'm always aware that the world around us is never going to be as beautiful and intact as it is now, so I do everything I can to take pleasure in it. One of our jobs is clearly to bear witness to this beautiful world we were given and to understand that it is never going to be quite as glorious again, so we had better pay attention."



Frederic and Mary Ann Brussat have been covering contemporary culture and the spiritual renaissance for nearly five decades. They consolidated all their work on Spirituality and Practice.com, a multifaith website providing resources for spiritual journeys.

“Climate change is no longer a consequence of our industrialization; it is a crime against humanity.”

- Amy Seidl, an evolutionary biologist

“Our political leaders have not only dropped the ball on this, they have hidden the ball. Capitalism, with its focus on profits and progress and greed, has failed us.”

- James Gustave Speth, environmental lawyer

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- Bill McKibben, activist and founder of 350.org

The above quotes are from the documentary, *The Wisdom to Survive*
- *Climate Change, Capitalism and Community*



Rucha Chitnis writes about the Sikkim Organic Mission which over 12 years has helped Sikkim transition into the first Organic State in India.

Chandra Prakash Ghimeray walks down his terraced farm and points to a grove of large cardamom on the far edge. We are in the village of Ranka in East Sikkim, a state that is the largest producer of large cardamom in India. Last year, Sikkim made world headlines by announcing it was the first Indian state to transition to fully organic agriculture. Ghimeray is hoping to ride the wave of economic possibilities of “Organic Sikkim,” where this coveted spice is a key value-added crop. Ghimeray has leased three acres of land, where he is growing a medley of fruits and vegetables. Ghimeray shares that he transitioned his farm to fully organic two years ago. “My production is still not optimum, but it will be in a year’s time. My wife and I are working very hard, and the government is supporting us with training and exposure visits,” he says.

“This is ahimsa cultivation. When you are farming organically, you are not killing your Mother Earth,” said Khorlo Bhutia, the spirited Secretary of the State for Agriculture of Sikkim. Bhutia is leading the charge on a mission that was considered unrealistic: transitioning an entire state to organic. “When you apply chemicals, everything is polluted. Our soil, air, water. Sikkim is a biodiversity hotspot. If our biodiversity is conserved, it’s good for our tourism. And for us, tourism is everything.”

Khorlo Bhutia believes that organic agriculture is “ahimsa farming”

The Lepchas, considered as the original inhabitants of Sikkim, called this Himalayan state, Nye-mae-el, quite simply a “paradise” on Earth. As a window to the revered Kangchenjunga, the third highest peak on the planet, this landlocked state is flocked by tourists from around the world who take delight in its natural splendour, monasteries and ancient culture. Tourism is bread and better for many and a mainstay of the economy. The “Organic Sikkim” branding is seen as a strategic leverage for the government to attract local and global visitors. “Our population is around 6 lakhs. And last year we had nearly 11 lakhs tourists visiting Sikkim,” said Khorlo. “The organic state transition is our chief minister’s long-term view to generate employment, increase tourism and have a value addition component to Sikkim.”

This dynamic “Organic Sikkim” vision is spearheaded under the leadership of one of India’s longest-serving chief ministers, Pawan Chamling, when a bold declaration was made in the state’s legislative assembly in 2003. In January 2016, Prime Minister Narendra Modi made a visit to inaugurate Sikkim Organic Festival and praised the state’s trailblazing journey in embracing a holistic agricultural model and stewarding its environment.

Sikkim Organic Festival had various demonstrations on indigenous technical knowledge practices for sustainable agriculture

While some may view Sikkim’s chief minister as the rare politician with a green thumb, others note he has a mixed record. Chamling is also infamous for the contentious expansion of hydroelectric dams on the Teesta River, a move that has been criticized by Lepcha and Bhutia tribes. The chief minister acknowledged that when this announcement was first made in 2003, there were naysayers who doubted the audacious vision.

According to Sikkim Organic Mission, it took 12 years to transition to an organic state. In the first phase, that spanned seven years, the government launched state-wide awareness programs, building the capacity of its field officers on organic farming practices and developing and documenting indigenous technical knowledge on bio fertilizers and pesticides. “We created livelihood schools, where 835 educated unemployed youth were taught organic farming practices. We developed soil-testing laboratories and set up integrated pest management mobiles. We also created seed processing units,” shared Bhutia. Over time, the state government eliminated subsidies for chemical fertilizers. Bhutia notes that

today Sikkim is producing 80% of its organic seed needs and has created organic farming practices for 35 crops. In 2010, the implementation of the organic transition began as per guidelines laid down by National Programme for Organic Production. "We are focussing on optimum production," emphasized Bhutia. "Look what happened in Punjab by the greed of the Green Revolution? They murdered their soil mother," said Bhutia

While transitioning to an organic state was no small feat, the task was easier given the size of the state and agricultural land. Sikkim is one of India's smallest states, second to Goa, with total geographic area of 7,096 square kilometres. Farmland is a little over 10% of the total area. The government was tasked to convert some 75,000 hectares to organic. Sikkim also has the smallest population with a little over six lakhs. According to the government of Sikkim, farmers in Sikkim also used much lesser quantities of chemicals compared to other states. "Our fertilizer consumption was 7 to 10 kilograms per hectare per annum compared to the national average of 70," remarked Bhutia.

Anti-dam activist, Dawa Lepcha, views the transition news with cautious optimism. "We are happy about the organic effort. However, at the grassroots level, things are superficial. My name is added to the list of organic farmers, but I have never been consulted. There are people in my village with no land papers, but their names have been included as organic farmers. Everyone should support the organic mission but the implementation seems haphazard," he observed. Lepcha is also concerned about market linkages given the mountainous terrain and remoteness of many rural communities. "Rural realities are different. We also need quality healthcare and education," he adds. Sikkim is also not food sufficient given a large floating population of migrants, tourists and the army. Inorganic produce from West Bengal fills a large gap in the state's food production.

Sikkim Exports Agro products.

Besides the tourism leverage, the Sikkim government is priming four key crops for organic export, namely ginger, turmeric, buckwheat and its famed

As farmers in Sikkim weave a new paradigm of farming, some ripple effects of "Organic Sikkim" seem to be in motion: The chief minister of Meghalaya has expressed interest in scaling organic farming in the state; the central government is promoting various initiatives to promote sustainable agriculture.

large cardamom. Cymbidium orchid is also one of the value-added export commodities. Sikkim, incidentally, is India's largest producer of large cardamom and cymbidium orchid. However, transporting fragile produce on a mountainous terrain to faraway urban centres in India is not a simple feat. "We are geographically isolated and incur a lot of transportation costs," concurred Dr. Anbalagan, Executive Director of Sikkim Organic Mission. Scaling production, marketing and nailing competitive prices will also pose as a formidable challenge. "We have identified five crops and plan to produce them to a marketable surplus. We have clustered areas for growing these five crops, which will be grown by [farmer] grower groups. We are trying to create an organic value linked chain for these groups," he said. So far, around 187 farmer groups have been certified organic, where the state government has footed the bill for the certification costs. "We have created a platform for our farmers, so it's up to them to take it forward. This is also an opportunity for young farmers," said Dr. Anbalagan.

New Farmers' Markets

This year, a new organic farmer's market was opened in Gangtok. Jashoda Tiwari, a farmer from South Sikkim, has been selling fresh veggies and greens in one of the stalls for several weeks. "My farm transitioned to organic two years ago," she says. "At first it was hard. We were still learning organic techniques that worked for our farm. The horticulture inspector told us how to use cow urine and cow dung to create natural fertilizers and pesticides. My production is still low,

but I am happy that Sikkim turned organic. We won't fall sick from eating food with chemicals," she says. When asked if farmers are tempted to use chemical fertilizers on the sly, she shakes her head. Flouting the rules can lead to consequences. In 2014, the state enacted the Sikkim Agricultural, Horticultural Inputs and Livestock Feed Regulations Act that criminalises sale, export or use of chemical pesticides and fertilizers; an offense may lead to imprisonment for up to three months or a fine ranging from twenty-five thousand rupees to a lakh.

While Laal Bazaar, the large, lively fruit and vegetable market in Gangtok, is teeming with locals, the organic market has few takers. It could be a while for Gangtok residents to warm up to organic produce prices. Meanwhile Ghimeray is keeping his hopes up. "My wife and I are working very hard to tend to our land and crops. We are hoping for the best," he says. As farmers in Sikkim weave a new paradigm of farming, some ripple effects of "Organic Sikkim" seem to be in motion: The chief minister of Meghalaya has expressed interest in scaling organic farming in the state; the central government is promoting various initiatives to promote sustainable agriculture. "Already the government of India has launched a scheme, Organic Value Chain Management for North Eastern states," said Dr. Anbalagan. "We have done what others have not ventured into. Now we also need support to take this forward."



Rucha Chitnis is a photojournalist and writer, whose stories highlight the power, dignity and counter narratives of women and grassroots movements. Her photo essays explore how women of color, indigenous peoples and farmers are debunking the dominant narrative and shaping their own future and destiny.

Originally published on Vikalp Singam.

Vrindavan

- the First Transition Town of India



Representatives of Krishna Temples and religious organisations have spearheaded the project of making Vrindavan the first transition town of India. It is now a fine example of faith based environmentalism: around fifteen devotees from ten different organizations presented various projects for developing sustainability in Vrindavan and this is their story.

An official meeting was held to submit documentation of all the activities to the Transition Network so that Vrindavan could officially be declared a Transition Town.

"We are hoping that this will create stronger inner bonds and momentum and attract more sustainable development from outside as well," said Radha Madhav Das, convener of the network.

He stressed development of local resilience to withstand future economic crises through strong communal bonds and joint green efforts on the political level.

"To avoid corporate-like development, we should take this chance of the government planning to restructure the Mathura district to improve tourism by submitting a master plan for a Vraja Eco-village and Mathura Green City," said Radha Madhav Das.

The meeting commenced with kirtan and concluded with honoring prasadam. The presentations were interrupted by spontaneous discussions that showed the need for more personal exchange in future meetings.

Shri Gopinath LalDev Goswami (Raja) of the Radha-Gopinath temple commenced the presentations. He put the emphasis on communication with the local people and is working on a parking solution for Vrindavan.

"There should be more parking in the peripheries of Vrindavan for the approximately 4000 visiting cars (there are approx. 300 local cars only). Solar power should be installed on every house – this may be supported with federal subsidies," said Goswami.

Sri Jagannath Poddar of Friends of Vrindavan proposed the establishment of a website and a facebook page. "We should agree on working on one project with a timeline and focus on education, sharing resources and responsibilities," said Poddar.

He added, "We have already submitted plans for a sustainable development of Vrindavan to the District Authorities and the Member of Parliament. We have demanded that our suggestions be included in the Heritage Cities and World Bank's Braj Circuit plan. We have advocated for the massive tree plantation in Vrindavan on both sides of the Yamuna, the establishment of peacock sanctuaries, a remedy for the plastic pollution and the revival of a traditional cow economy."

Sri Partha Sarathi of Food for Life explained, "Vrindavan also includes rural areas that come with great challenges for education, because "they don't know that they don't know," especially the grown-ups. Food For Life Vrindavan is focusing on educating the children by giving them free education, transportation, clothes and medication to 1500

“Food For Life Vrindavan is focusing on educating the children by giving them free education, transportation, clothes and medication to 1500 students in Vrindavan. Most students arrive to school in one of the eleven bullock carts, and environmental education is a compulsory subject. The school also segregates its waste, has water harvesting facilities and a is home to a five acre organic farm.”

students in Vrindavan. Most students arrive to school in one of the eleven bullock carts, and environmental education is a compulsory subject. The school also segregates its waste, has water harvesting facilities and a is home to a five acre organic farm. Shri Madan Bihari Baba from the Braj Vrindavan Heritage Alliance reminded, “Mathura was recently declared a heritage site and we should take advantage of this because Vrindavan comes within Mathura district.

This is a chance to reforest Vrindavan. Vrindavan means ‘forest of Vrinda’, so without the forest, there is no Vrindavan. In Tatia Sthan they have preserved the old trees but in many places they are being cut down.”

H. H. Tamal Krishna Maharaj from the Imli Tala temple was also concerned about the traffic congestion in Vrindavan. He advocated for better parking facilities.

Sri Sarvanga Gauranga Dasa from Akshay Patra presented their new Vrindavan Candrodaya temple project. The temple will be the world’s tallest Krishna temple and attract thousands of visitors to Vrindavan. The temple and its surrounding buildings are constructed following the highest US LEED gold standard for sustainable construction. The 5.5 acres temple area will be surrounded by 31 acres of new forest – a replica of the twelve forests of

“ Don’t litter the land of your faith”, sums up the fervour with which people get together to clean up their town.



Satsangs, nature walks and picnics bring people together to serve the cause of sustainability.

Braja Mandal. Visitors will be able to view the trees from a skywalk and they should be inspired to visit the original forests and help to preserve and restore them.

Sri Ananda Vighraha Dasa of Vrinda Kunja Ashram presented their engagement in cleaning Vrindavan especially from plastic pollution. Their teams go on regular cleaning trips in different places in Vrindavan, also at the banks of the river Yamuna. They successfully dug a channel that brought back the water of the Yamuna closer to the banks. The Jagannath temple has offered their land to them and they have started an organic garden there.

Sri Radhamadhav Das of the Environmental Committee of the World Vaishnava Association and the Bhaktivedanta Learning Institute for Self-sufficiency (BLISS) was representing ISKCON Vrindavan.

He informed the forum about Iskcon Vrindavan’s activities on sustainability. He said, “Iskcon Goshala has 365 cows and a large cow dung biogas plant. A new 40 acres organic farm is being developed. Last year ISKCON inaugurated BLISS that focuses on education, networking and research. They have a few acres of organic garden, study facilities and an organic shop and are presently researching organic cloth production and seed preservation.”

Everyone agreed that Vrindavan has all the potential to be a transition town. The meeting concluded with a promise to share ideas, information and resources across the different organizations to make Vrindavan the first transition town of India.

This article was originally published on Vrindavan Daily. which is a non-denominational, non-sectarian site publicizing vital issues realting to Vrindavan’s heritage and environment. All photographs are from their website.

Transitionin

Innumerable thinkers and activists are focusing on sustainable living. People all over the world are holding conferences, starting organic farms and beginning new initiatives in water and waste management, food, health and ecological design that follow principles of Nature.

While transitions of societies seem to be heavy stuff, personal transitions in small groups and large communities is also about having fun!



Paint a Wall

All you artists out there - art for a cause may be great for your soul! Find a wall that nobody seems to care about, or get the permissions you need, choose your message and let your creativity flow! Sustainability needs artists as much as renewable food and energy...

Set up a stall at an Organic Mela

We have all been on the buying side of stalls in Organic melas which are becoming more and more common in many cities. Now get on to the other side, and make and/or sell healthy foods, crafts, clothes - anything that is hand made. If your city/town does not have melas - start one with a few



Start a Community Garden

Do you have a terrace or a backyard? Then start a vegetable garden, watch children bloom in them. No garden space? Then look for one to share, or vacant lots or a patch of wasteful lawns. Then work along with a bunch of neighbours to create a little ecosystem that you can enjoy and also eat a bit of!



Organise an Organic Cook-in

Food is always fun. Transitions in our food systems and food habits are essential to help us eat and live happily. So organise a space to cook organic millets, salads and yummy snacks together. Or a potluck meal where your group can share food and recipes as well as seeds of joy.

ing Joyfully!

Yes, the uniquely human spirit of having fun while spreading a valuable message is evident in many parts of the world - and this also brings alive a diversity of forms of music, art and crafts. Inspired by what is happening around us, we suggest these ways of transitioning joyfully!

So get away from that computer or TV, join a group in your city or town - or start one - meet people and enjoy yourself as you do your bit for mother Earth!

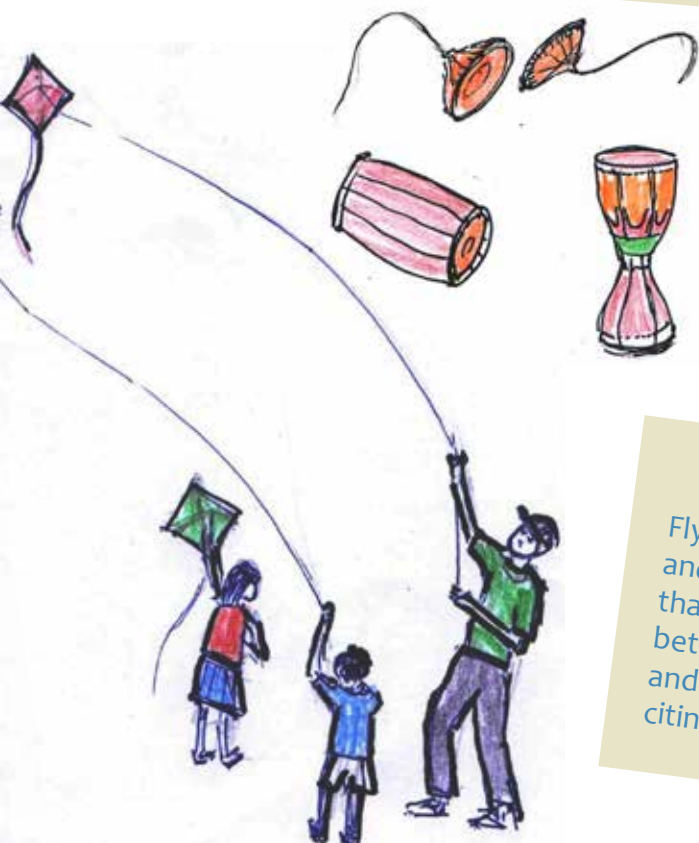
Dance to Folk and Tribal Music

Communities dancing together has been an age old practice in India - and all over the world. Discover the sheer aliveness of dancing in circles that city life has made us forget. Dancing in a sustainable world helps us move away from passive entertainment, own up our bodies and helps us build togetherness in communities.



Drum Jam

Just bringing together a small community can be the beginnings of great transition work... Get a couple of compulsive drummers, ask people to get their own Djembes, Bongos, Tablas, Tins and Boxes. Drum Jam to your heart's content and if possible top it off with a hearty millet-veggie lunch together!



Fly Kites

Flying Kites, making rangolis, learning new songs and group singing at events - these are all activities that can make life enjoyable and are much, much better than retail therapy! Look out for the spaces and events in your part of the world that seem exciting - and get there...do that...

Trek, Nature-walk, Bird watch

In cities and towns as much as in villages there are gardens, lakes and little wilderness patches that can gladden your soul and help exercise your body. Discover them, use them, foster their loveliness. Also encourage a group to join you, ask a bird watcher or naturalist to guide you - you may soon become one yourself!



Embrace Nature by Climbing Trees



When was the last time you climbed a tree? Or have you ever climbed any tree in your life? Meet Verhaen Khanna, a young Delhi resident who connects people with the environment by teaching them how to climb trees, hug them, plant them and a lot.

"Many people in big cities suffer from tree blindness. They notice each other's cars, clothes and houses, but they don't notice the trees around them – a new tree that has been planted, an old one that was cut down – everything goes unnoticed. I see trees being cut down in Delhi everyday because of silly reasons that people have – some say the trees prevent sunlight from coming into their houses, others complain about falling leaves and flowers, and yet others about the gathering birds. They cut them to make space for parking, for street lights, and so many other reasons, forgetting that these trees are alive and they are growing," laments Verhaen Khanna, the founder of New Delhi Nature Society (NDNS).

27-year-old Verhaen, a resident of Delhi, is on a mission to cure tree blindness with some unique activities meant to bring people closer to nature.

He started NDNS in 2014, just as a Facebook group where he posted information and pictures of environment-related activities like tree planting, camp-outs, etc., which he was doing with his friends. Slowly, more

people started getting interested in his nature outings and the community grew.

"I decided to call it the New Delhi Nature Society because, as the name suggests, it is for all the people in New Delhi who are inclined towards nature. Here, no one needs to sign forms or give any passport-size photographs. You just have to be proactive about the environment, love nature, enjoy it, take pictures, and have fun," he says."

The core of NDNS lies in the

Twenty seven year old Verhaen Khanna, a resident of Delhi, is on a mission to cure tree blindness with some unique activities meant to bring people closer to nature.

He started the New Delhi Nature Society (NDNS) to get people more involved and connected with nature.

awareness activities and workshops Verhaen conducts to get people more involved and connected with nature.

One of the most interesting workshops he has been conducting around the city over the past two years is where you learn everything about climbing trees – an activity that was considered fun and commonplace not many years ago but is dead and forgotten in most parts of urban India now.

"People are quite disconnected from trees in big cities. They think climbing trees is not for them. In Delhi, you will hear people saying 'let's go sit in a mall,' but sitting on a tree? It is something that they are scared of," says Verhaen.

Tree Climbing Workshops

His tree climbing workshops are open to children between the ages of '5 and 150'.

"We make adults feel like children. Many senior citizens come for the workshops and they are always very happy. Some say that they had not climbed a tree in 50 years. I have met

some teenagers in schools who have never touched a tree in their lives, and it is disappointing. They are scared that the tree will bite them or something if they touch it. But once they start climbing and get accustomed to it, they are almost like monkeys, having a lot of fun,” he laughs.”

Verhaen usually conducts the workshops in places like Lodhi Garden, Nehru Park, New Friends Colony, farmhouses with big trees that belong to people he knows, etc. “Sometimes we go to explore secret places in Delhi that not many people know of, so they are not crowded. We find large banyan trees with vines that are fun to swing on...It is spring in Delhi right now and there are so many trees with beautiful fruits and flowers. We have found that trees with fruits are such that it is easy for people to climb them and reach the fruits,” he says.

Environmental Activities

Other activities include camping, planting trees, artwork using recyclable materials, workshops for tree hugging, camp-out sessions with yoga classes amidst nature, workshops to sensitise students about the environment, astronomy workshops, etc. Verhaen is currently concentrating on designing more programmes for school and college students as well.

Children have started loving the trees in their surroundings and people have become more compassionate towards nature.



From being tree blind to being able to identify trees and knowing their names, Verhaen has witnessed people being transformed in terms of how they see nature with the help of these workshops and videos.

He organizes a couple of workshops every month in collaboration with different organizations working in the field of environment conservation, which help him in getting more people on board.

Currently, he is conducting a tree census in New Friends Colony, where people just get together to count trees in the locality and document information about them, like tree type, height, girth, any special observations about the tree, etc. Most workshops have groups of 20 participants. While some workshops are free and people can donate whatever amount they want for NDNS, others have an admission fee of Rs. 100-200.

Verhaen studied aviation and is a commercial pilot by training. “I am not flying right now and am focussing my time and energy on these valuable

activities, which are adding value to my world too,” he says. He is working on NDNS alone, with some volunteers and interns who keep joining from time to time. Additionally, he is also working as a light painting artist in a friend’s organization, and uses the income from there to sustain himself and organize the workshops.

Making Nature Cool again

Verhaen has also launched a YouTube channel of NDNS, where he uploads two series of videos – Project Swachh, covering interviews with people doing environment-related work, and WTF Quickly, short videos about nature that are uploaded every Wednesday, Thursday and Friday (thus WTF).

From being tree blind to identifying trees and knowing their names, Verhaen has witnessed people being transformed in terms of how they see nature with the help of these workshops and videos.

Children have started loving the trees in their surroundings and people have become more compassionate towards nature

“The idea is to make nature a cool thing again. We live in such times where children know the names of different brands by heart, but not the names of plants. I am trying to create an army of ninja environmentalists who will take care of the environment as a larger team in the future. So if you are suffering from tree blindness, find friends who know about trees and spend time with them – they will be the best people to teach you about trees.”

“Go out and have some fun in nature,” he concludes.



Tanaya Singh is associate sub-editor at *The Better India*.

This article has been reprinted with permission from The Better India where it was originally published.

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Is There Life Before Death?



Living primarily in the future could make us psychologically “extinct” long before climate catastrophe does so biologically. It’s time to ask ourselves whether there is life before death, says Carolyn Baker.

Living primarily in the future could make us psychologically “extinct” long before climate catastrophe does so biologically. It’s time to ask ourselves whether there is life before death...

For if not, we are as good as dead.

As the conversation about Near-Term Human Extinction (NTHE) grows increasingly deafening, I notice many people behaving as if they are already dead---and in fact they may be. Do we have 15 years, 20 years, 50 years? Should I move to another location? What’s the point of doing the job I now have? Why even have health insurance if I’m not going to be here anyway? And on it goes...

I have no problem with preparing for the future. I’ve been writing books on that topic for about six years. The future has come to meet us and smack us upside the head on just about every level imaginable. And...living primarily in the future takes a terrible toll on us in current time. In fact, it strip-mines our lives in the here and now and guarantees that we become “extinct” long before NTHE does its dirty deed.

Recently, I was watching an interview with mindfulness teacher, Jon Kabat-Zinn. When asked what he believes about life after death, Kabat-Zinn responded by saying that he doesn’t think about it much because he’s much more intrigued with whether or not there is life before death. If there isn’t life before death, he said, then we are already dead.

So how do we reconcile living life fully in current time with NTHE? The simplest response I have is: Give them equal time. Read the science, keep current with the news, talk about it with people with whom it is safe to do so, but give the present moment as much time as you give NTHE.

Giving the present equal time means committing to several necessary practices.

1) Get away from the computer and the stack of books and get yourself OUT into raw nature. I never cease to be amazed at individuals who “fight for” the environment but don’t know how to spend quality time in it. This means not doing anything in nature

but simply being in it. That sounds like a big waste of time? Good. That anxiety you’re feeling when you think about this is a tip-off that that is exactly what you need to do. When immersing yourself in nature, don’t “go for a hike” or “exercise” or “garden.” Just simply be mindfully present in nature. That means listening to every sound intently, really noticing everything you see, smelling the fragrances (unpleasant as well as pleasant), perhaps even tasting grass or leaves or plants that you know are safe to eat. Sit or lie on the earth. Honor your sensuality, and bring your body into contact with nature. Lose yourself in Earth eroticism.

2) Practice appreciating beauty at least once a day. It could be taking a moment to look at, smell, or touch the flowers growing wild or in your backyard. It could be painting or drawing something beautiful. It could be listening to an extraordinary piece of music that moves you to your depths. It could be cooking an exquisite meal for your loved ones.

3) Practice creativity every day. Creativity can be expressed in myriad

forms---writing, drawing, cooking, playing music, helping your child with homework, planting a garden. Make something new every day even if that only means cleaning, de-cluttering, re-purposing an object. Learn and tell stories---especially to children and to each other. Tell stories of heroes and “sheroes” of integrity and passion for the earth. Immerse yourself in mythology and allow it to reveal to you the story you came here to live.

4) Live passionately. “Suck the marrow out of life,” as Professor Keating might have said in “Dead Poet’s Society.” And speaking of poetry, delight in reading and writing poetry and memorize it by heart, from the heart.

5) Move/exercise/stretch the body every day. Recently, when leaving the gym where I work out several times a week, I heard wonderfully wild music coming from a Zumba class and stopped to watch. I found myself welling up with tears of joy as I focused on every individual in the class dancing their passion. Indeed, many individuals are ill or suffering from chronic pain or severe disabilities and cannot take Zumba classes, but every one of us can do something for the body every day.

6) Express love to another being every day. Beyond someone in your family, make a conscious effort to be kind to someone or something. It may be easy to express love to family members or pets, but it’s often more challenging to extend kindness to the grocery clerk,

the bank teller, or the customer service person on the phone whom you will never see and whom you can’t wait to stop dealing with.

7) “Inflict” humor and joy on others when least expected. This does not mean being disrespectful or insensitive. Be discerning and considerate, but lighten up as you carry the heavy load of Anthropocene awareness.

8) Breathe, breathe, breathe. Check in with yourself regularly to see if you are breathing. The second you feel stressed, breathe. Taking long, slow, deep belly breaths is the best medicine for body and mind in any situation, even when you’re not feeling stressed.

9) Practice acceptance. Acceptance does not mean being resigned. It means recognizing the actuality of things without your particular story of how bad the situation is or your story of how the future will play out. It means taking a situation into your awareness and working with it in order to help it find its own place in your heart and mind rather than being the dominating force in your life.

10) Commit to a stillness/mindfulness practice. You can be well aware of NTHE and the probability of a bleak future for humanity and at the same time be passionately alive. One of the most effective ways of facilitating this is learning and practicing mindfulness. It is one of the oldest survival techniques known to our species.

Hunter-gatherers knew that if they didn’t practice mindfulness, they would be eaten.

As a result of our awareness of NTHE, we can easily get caught in depressive rumination, that is, a thought pattern that keeps bringing us down. If you find yourself ruminating, ask: Who is ruminating right now? Just keep asking the question. You are not your thoughts but the awareness of your thoughts. Ruminations come and go, but you don’t. Wherever you go, there you are, so it’s more than important to know who’s ruminating.

If action is the antidote to despair, then stillness is the antidote to hysteria and rumination about the future. A short exercise by Kabat-Zinn offers a taste of mindfulness practice. Kabat-Zinn founded the renowned Stress Reduction Clinic at the University of Massachusetts, and his video presentation on Mindfulness, Stress Reduction and Healing is a remarkable integration of science and mindfulness.

Lest we assume that practicing mindfulness is just one more form of sitting meditation, it’s important to understand that it can be practiced anywhere---while walking or doing almost any activity because it simply involves paying full attention to whatever we are doing or experiencing in the moment.

So there is life before death, and as the African proverb says, “When death comes, may it find you fully alive.”

If action is the antidote to despair, then stillness is the antidote to hysteria and rumination about the future.



***Carolyn Baker** PhD, a psychotherapist & former professor of psychology & history, is the author of *Love In The Age Of Ecological Apocalypse* & other books. She offers life coaching for people who want to live resiliently in the present as they prepare for the future.*

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YOU CAN'T DO JUST ONE THING:

A Conversation with Richard Heinberg



Noted author, educator, and energy researcher **Richard Heinberg** discusses the systems view of life with **Michael Stone**. "It's like seeing in 3D and in color", he says.

Michael Stone: When you think about the systems view of life, what comes to mind?

Richard Heinberg: A lot of things. One is the phrase, "You can't do just one thing." The world is filled with relationships, and anything we do is going to impact parts of the system that we may never have even thought of.

The whole systems view stems from ecology, the study of the relationships between organisms and their environment — which is a discipline that got its start way back in the 1860s. Until ecology came along, we were studying organisms in isolation. Once we look at the ecology of, say, hummingbirds, we're also looking at both their external environment and the way they relate to other organisms; we even have to consider their internal microbial environment.

This way of thinking is fundamentally different from other aspects of Western science, and has altered the way many of us see the world. For example, in my work, which mostly has to do with energy, I've found that in taking a systems view, energy becomes a window through which to see and better understanding both natural ecosystems and human social systems.

When we look at human societies through the energy lens, we find

ourselves seeing food as energy, technologies as ways of leveraging energy, and social complexity as a by-product of high rates of energy usage. Of course, we also become more keenly aware of the environmental impacts of energy production and consumption. As we become more energy literate we also pay more attention to how much energy we get back from our efforts at producing energy — whether growing food crops or drilling oil wells — and energy-returned-on-energy-invested (or EROEI) becomes a useful tool for evaluating potential energy sources.

There are many important questions that don't arise if we look at energy from a linear, one-thing-at-a-time point of view, which, unfortunately, is still largely dominant in our society. When you take a systems view, it's like seeing in 3-D and in color.

The whole systems view stems from ecology, the study of the relationships between organisms and their environment — which is a discipline that got its start way back in the 1860s. Until ecology came along, we were studying organisms in isolation.

MS: Is there a reason why people have difficulty doing this?

RH: I think it mostly has to do with the history of Western thought and our tendency to divide reality into subject areas. It also has to do with our focus on naming things. Some languages are big on verbs, and some are big on nouns. We inheritors of the Indo-European language group have concentrated more on nouns and a little less on verbs than people in some other societies, such as the Native Americans. When we see life as a process rather than as a thing, we tend to take more of a systems view. Is that a crow — a static object — or is it life "crowing"?

MS: Is there something in our cultural history or our evolutionary history that slants us towards one way of thinking?

RH: The linearity of Western thought has a lot to do with forms of logic pioneered by the Greco-Roman philosophers. But in a larger sense, civilization itself fosters a "divide and conquer" attitude, and this is true no matter whether we're talking about Chinese, Aztec, or European civilization. City-centered living requires a constant harvesting of wealth from local ecosystems and also from peripheral peoples. It's no accident that civilizations gave rise to money, trade, and sophisticated weaponry.

MS: What are the ways that help people become aware of an alternative way of thinking?

RH: I don't think there's anything that helps more than spending time in nature, especially if we have someone along who can describe to us what we are seeing so that see a little more deeply. A lot of us are simply tone deaf to nature. Even if we go outside and look around, we don't understand what we're seeing. It helps to have a guide who can interpret the ecological tapestry. Once we learn the code, we can begin to understand those relationships for ourselves; it's like learning to read: once you have that skill, whole worlds open up. I'm still mostly a novice in this department, but I'm fortunate to have spent some time with a few fluent nature interpreters, and even that little bit of guidance has been an enormous help.

MS: Where would this view of life make the most difference in the issues facing people today?

RH: It would make the most difference at higher policy levels. We have applied the divide-and-conquer attitude across the board to energy, natural resources, finance, you name it, and the results are uniformly dire. What we've gotten as a result is a brief spurt of economic growth, with worsening environmental problems and an increasing rate of depletion of resources. Civilizations often seem to do this: they trade resilience and sustainability for short-term wealth.

As I argue in my latest book, we've probably hit the limits to economic growth already or are in the process of doing so. So it's extremely important that we learn to adapt to natural limits in a way that doesn't jeopardize future generations — and that's going to require systems thinking.

MS: Are people more open to that view than they used to be?

RH: I think more people are now than was the case a few years ago, but we are seeing a substantial backlash from some folks who feel threatened by ecological thinking. They want to eat their cake and have it too. They feel that they're entitled to returns on their investments, and if the environment isn't cooperating and providing them with those, then it must be somebody's fault. The solution therefore is to find out whose fault it is and deal with

A lot of us are simply tone deaf to nature. Even if we go outside and look around, we don't understand what we're seeing. It helps to have a guide who can interpret the ecological tapestry. Once we learn the code, we can begin to understand those relationships

them — whether it's the EPA, the perpetrators of the climate change "fraud," or whoever. If your solution to life's problems is to find villains, there are always plenty of candidates around.

MS: Do people sometimes turn this around and say, "We're the villains, and we have to change"?

RH: Yes, and in fact I think that's the inevitable conclusion when taking a systems view. In some ways, we're victims of our own success. Our strategy of dividing and conquering nature has given us enormous wealth and power, but also put us in profound peril because of changing climate, species extinctions, depleting topsoil, depleting energy resources, and more.

We can't solve those problems one by one, in isolation. We can't address topsoil depletion without addressing our entire agricultural paradigm. And that leads us to reconsider the extractive, industrial paradigm.

MS: Are there things that make you hopeful that there is an audience for this message?

RH: I don't think one can be around young people without having a sense of hope. I was just at a conference put on by students at Harvard around the idea of creating a new economic paradigm, much along the lines of systems thinking, and it was exciting to meet and talk with these very bright young people, who are obviously concerned about the future.

There are several hundred Transition Initiatives around the world and over a hundred here in the US; these are grassroots efforts to move communities away from oil dependency and build resilience. I think the Occupy movement is also a sign of hope. It is largely populated by young people who are seeing that is really no future if we keep going in our current direction, and

they're willing to put their education on hold and go out in the streets and make a fuss. Ultimately I think that's what it's going to take.

MS: Do you see those people as coming out of a place of hope, or is it more of a sense that "This is our last chance. This is desperation"?

RH: I think it's both. I don't think that folks in the Occupy movement would be taking the risks they are if they didn't think both that this is our last chance, but also that there is hope.

Occupy has changed the national conversation. The notion that the top one percent is running the country to the detriment of the ninety-nine percent has become part of the national dialogue. Of course, critique goes deeper than that. What's really being said is that the fundamental economic structure of our society is both inequitable and unsustainable from an ecological point of view.

MS: Any other thoughts about the systems view?

RH: Eric Sevareid once said, "The main cause of problems is solutions." He was saying that the way we currently go about solving problems simply creates more problems. When we look at our problems in isolation, we address them in ways that just dig us into a deeper and deeper hole.

But when we become systems thinkers, we find there are sometimes universally beneficial ways of addressing problems. We mimic nature's ways of doing things. If we're coming up with a solution that works for a whole array of problems, it's probably a good way to go, and it's most likely either coming from a systems approach or leading towards one.



*Michael K. Stone is the primary author of the Center for Ecoliteracy's book, **Smart by Nature: Schooling for Sustainability**. Michael has been the managing editor of **Whole Earth** magazine and has also written for the **Toronto Star** and **The New York Times**.*

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“Opening the Floodgates of the Indian Economy to FDI is Disastrous”



says **Devinder Sharma**, food and agriculture policy analyst. In the second phase of sweeping reforms, India has opened up defence, pharmaceuticals, food processing and other sectors for FDI. He believes that this will lead eventually to a situation where for every dollar invested in the country, two dollars are repatriated.

The floodgates have been opened. In what is being termed as the second phase of sweeping reforms, India has opened up for aviation, defence, pharmaceutical, single brand retail and food processing besides opening up animal husbandry and apiculture. Prime Minister Narendra Modi says that a radical liberalized FDI regime will turn India as the most open economy in the world providing major impetus to employment and job creation.

Whether it is water or economy, opening the floodgates certainly brings in a surge. But unlike the opening of the floodgates of a dam, wherein flood waters do not flow back, the unhindered flow of FDI does not only mean that it will bring in a deluge of foreign capital but eventually for every dollar invested in the country, two dollars are repatriated. Moreover, at a time when the world is witnessing a jobless growth, I don't know how the government is confident that the FDI inflow will end up creating more jobs.

The desperation for creating jobs is clearly visible. The Labour Bureau has estimated that only 1.35 lakh jobs were created in 2015, which is the lowest in the past six years. You will agree this is not even a drop in the ocean. In a country where roughly 1.25-crore people join the employment queue every year, only 1.35 lakh people finally

getting through to jobs clearly shows that the economic system is failing to deliver. Well, one year's job creation data is certainly not enough to pass a judgment but the employment graph for the past 12 years, beginning 2004 when Dr Manmohan Singh took over as Prime Minister, has remained equally bleak.

Only about 1.6-crore jobs have been created in the past 12 years whereas roughly 14.5-crore people were in search of a job.

The pressure to create jobs therefore is evident. But that's exactly what the Manmohan Singh government was trying to explore when it had tried to open up to more FDI. In a tweet on Dec 5, 2012, the then Chief Minister Of

Only about 1.6-crore jobs have been created in the past 12 years [inspite of opening up FDI] whereas roughly 14.5-crore people were in search of a job.

So how is the Government confident that more FDI inflow will end up creating more jobs?

Gujarat, Narendra Modi had written: "Congress is giving nation to foreigners. Most parties opposed FDI but due to sword of CBI, some didn't vote & Congress won through the back door". While in Opposition, Arun Jaitley had in 2013, said: "FDI is not in favour of the consumer, farmer, trader, manufacturer and the country. That's why we are opposing it and will continue to oppose till our last breath. We stand united with the traders and the people of this country."

So what has transpired in the last four years that has made the NDA go in for a complete U-turn of its earlier stand? Former Finance Minister P Chidambaram calls it Opposition Syndrome. While I may dismiss Chidambaram's criticism of the Narendra Modi government opening up to FDI in a big way, but one certainly fails to understand the reasons for the new found love towards FDI. Nothing has transformed so dramatically in the past four years as far as the global experience with FDI is concerned that a 180 degree turnaround can be justified but then that is politics.

Although Commerce Minister Nirmala Sitaraman has made it clear that the policy has been tweaked to ensure that it does not hurt domestic jobs, but the sudden announcement of the opening up of Indian economy

without any nationwide discussion raises more questions than provides answers. For instance, I don't still understand Why has FDI has been allowed in apiculture? Bee-keeping is a supplementary income source for the farmers, already under a severe distress, and any effort to allow control over the market by big business interests from abroad will only push these small farmers out of business.

Relaxing the requirement of 'controlled conditions' in animal husbandry, pisciculture, aquaculture and apiculture has been welcomed by the industry. With the improved technology coming in from the western countries, the domestic industry feels it will bring in better breed of milch animals, and there will be increased investment by foreign research laboratories. In reality, this runs counter to the NDA government's policy of promoting desi breeds. What is being overlooked is that India does not need new improved exotic breeds but needs to bring back its own domestic breeds which are doing exceptionally well in Brazil. Over the years, Brazil has become the biggest exporter of Indian breeds of cows. A purebred Gir cow in Brazil provides a milk yield as high as 73litres/day.

The conflict will become more pronounced when major dairy multinational corporations begin setting up big cattle farms to get into industrial dairy farming operations.

Why has FDI has been allowed in apiculture?

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The pharmaceutical sector is what is expected to be hit most. India has so far been hailed as the drug factory of the world providing cheap generic drugs. This has been under attack at the WTO which has relentlessly been pushing the commercial interests of the drug multinationals.

Although the FDI rules are still not available, the fact remains that the Indian dairy cooperatives have been under assault from private ventures keen on setting up big industrial dairy farms, which have come under a lot of criticism in the west for the environmental damage it wreaks. On the other hand, the milk cooperatives in India have been economically helping 80 million milk producers, a dominant part of which comprises farm women. The livelihood of these small producers will come under threat.

Earlier, FDI was justified in the name of bringing in 'state-of-the-art' technology into the country. Although Defence and civil aviation has been opened to 100 per cent FDI route under the government approval, it is now clear that investors are not keen to bring in cutting-edge technology into the country. Similarly for the single-brand

retail, the government has practically done away with the clause that ensured 30 per cent local sourcing. The primary objective of seeking FDI should be to provide new technology and enable the domestic manufacturing to gain from business integration with the foreign companies. Bypassing the domestic manufacturing sector will certainly not add to job creation.

The pharmaceutical sector is what is expected to be hit most. India has so far been hailed as the drug factory of the world providing cheap generic drugs. This has been under attack at the World Trade Organisation which has relentlessly been pushing the commercial interests of the drug multinationals. Forcing India to accept their patenting norms to make it compliant to the industry needs, allowing FDI in both greenfield and brownfield projects could spell doom for the domestic industry. While this would hit the average consumers with high prices impacting the health for all programme, it will also limit job creation.

Returning back to the promise of job creation, it has always been a forgotten promise. When Pepsico entered India in the 1980s, it promised to create 50,000 jobs. In a reply in Parliament, Ministry of Commerce had later acknowledged that less than 500 jobs were created. Pepsico is not the only exception. It will be interesting to know the facts and realities about the tall promises being made to create jobs whenever foreign companies try to enter the country or special economic zones are created.



Devinder Sharma is a Food and Trade Policy Analyst and Activist.

He writes on policy issues concerning sustainable agriculture, biodiversity and intellectual property rights, environment and development, food security and poverty. He is also a member of Bhoomi College's Advisory Panel.

Earth Paradise

Jeremy James takes a fictional flight to the moon and discovers the true majesty of the Earth.

Dr Obruchev ("call me Vladi"), the mission leader, pointed to the plateau. "Go straight up. Don't turn around," he said, "or you'll break the spell." To look back before you reached the plateau would spoil it: you wouldn't get the full impact. What's more, Nature had conveniently placed a flat-topped rock at the back of the plateau, "like a municipal bench", he said, "put there by some obliging council officer with an elegant sense of duty". A perfect viewing platform. Besides, there was another thing.

The plateau was about 400 feet up. You could see it clearly from the bottom as you approached. It looked as if it had been deliberately cut from the rock, as did the track up to it. Vladi shook his head: "That too was a freak of Nature. Who could have made it?"

I could hear my feet crunching on the brittle stone as I climbed. My breath seemed loud. Sweat ran down my spine. There wasn't a single sign of life anywhere, though it didn't stop me looking. I kept thinking I might see a mountain goat, or a hare or a lizard, but I knew there couldn't be any. The rock was a mix of basalt and some other igneous composite that had been subjected to enormous temperatures, split and crumbled into these ragged shapes amongst the slabs.

The temptation to turn round all the way up had been strong; I could feel the image rising behind me, could sense its presence composing itself as I ascended, step by gritty step.

The plateau was exactly as Vladi had described: perfectly level, and at the back of it was this convenient municipal rock.

My feet crunched loudly as I crossed the gravelly floor. I stopped at the rock bench, breathed in, closed my eyes, turned around and sat down. I kept my eyes closed and with my hands on my knees allowed myself to calm down. It had not been a hard so much as a steady climb, and my oxygen intake was low.

Vladi had been right about the other thing: once you turned round, the experience was vertiginous. The first time it happened to him he very nearly fell off the plateau. I was careful to sit down, to follow his advice.

As soon as I opened my eyes, I slewed from the stone, dropped forward and landed with a crump on my hands and knees, walloping my head against my visor. It was the

most peculiar sensation, as if I had been pulled, and it left me reeling for a good five minutes, lying on my side. Quite why it did that, I do not know. I crawled back onto the rock and this time I looked up slowly, carefully, clinging on.

Views have different effects on us, depending on the place, your mood, your age, the time of day or night, who you're with. I like being alone. Some views evoke memory, others arouse images from half-remembered dreams. Some make you relax. Others alarm. Some take your breath away. This one nearly took my life. My heart stopped. I know. I felt it skip a beat and stop. It gave a great thwack and got going again, but not before making me completely light-headed. I thought I'd had a stroke, a blood clot - I'd given my head a hard thump when I fell.

I could see all of Africa. All of it. From the Straits of Gibraltar to the Cape. I could see the Nile. It sparkled suddenly in the sun, just as I was watching, in a flash that ran all the way along its length right to its delta. The Sahara shone like a vast freckled ingot, while beneath, equatorial Africa was ribboned in a living, green mantle. I couldn't stop looking, couldn't tear my eyes away. But the seas! The seas, the oceans; the reefs and shallows, atolls, islands and depths described in such a bewildering palette of blue and turquoise that I found myself gasping for breath, again and again.

White-headed mountain ranges pricked the brown like a procession of ancient gods, their feet sequined about with patchworks of greens and yellows, crimsons and purples, all swathed in a toga of nitrogen blue. It was obvious, abundantly obvious, that the whole planet, the world, the Earth itself was alive. It was one vast, living ball suspended magically in an ocean of ether that was also life but of such a different kind that I couldn't possibly comprehend it.

The blue globe moved, a great living goddess striding resolutely and alone, bearing all her children defiantly through the blackness of space with dignity and purpose, her trailing skirts streaming around her. She was the most exquisite being I could ever have imagined and her whole, magnificent form tumbled slowly, silently across eternity. My eyes filled, throat knotted. I had to look away. I was overcome. Utterly. Overwhelmed.

How anyone could ever wish to do her harm - to do any injustice to her body, to mutilate her face, was an

How anyone could ever wish to do her harm - to do any injustice to her body, to mutilate her face, was an unforgivable crime. She was not to be torn or hacked at, but revered. In that moment I felt, small, absurd, insignificant. I longed to be back there. I did not want to be on the moon. I wanted to be in her arms. I ached for the company of her trees, her rivers and mountains, to gaze upon her family of animals, watch children play, put my hand in a stream.



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Slowly she revolved on her invisible axis. Europe came into sight, and the great white polar cap. I had looked at thousands of photographs but not one of them ever came close to describing the sheer, outright majesty of the world, her aura, her divine beauty, staggering to behold. What a treasure she was, how glorious, unique. How fantastically privileged we were to know, to experience it. How valuable every single thing, how much every fragment of life matters, down to the tiniest mite. There's nothing else like it. Nothing. No place we can identify with and say, ah yes, that reminds me of...

Take-off and touchdown had been as smooth as any commercial airliner. We got back six weeks ago. The first tourist flight: they took three of us. Sold my house, sold my business, all my shares, cashed every penny of my savings. Just enough to scrape in. The other two paid a lot more, but it got us all up there and helped to fund the new oxygenating plant. Vladi and his team are growing deep-rooting, drought-resistant legumes under sheets of reinforced plastic, lit

and warmed by the sun. Water is precious and nothing is wasted but all the same we learned that the plants are growing well and their exhaled moisture is condensing on the plastic, which is the point. The plan is to bleed oxygen into the atmosphere, enough to colonise lichens and... It's all beyond me. I hope they succeed. Projects as far-sighted as that might one day take us to the other side of the sun. Maybe there is a paradise there too.

But I'm not leaving the Earth, not again. I looked up into the stars when I stood on the moon. They seemed very close. Very bright. Maybe somewhere out there are other paradises – maybe. But you'll have to go a very, very long way to match this one, if there is another at all.



Jeremy James, inspired by the nomadic travels of African camel drovers, set off on his own journey on horseback from Turkey to Wales. He has written several books, including *Vagabond* – his tale of riding through Eastern Europe during the collapse of communism.

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Globalisation and Terrorism



Helena Norberg Hodge, a pioneer of the Localisation movement, shares her concerns of how Globalisation is fostering violence and specifically terrorism around the world.

For people in the modern world, there may be nothing more difficult to comprehend than the group calling itself the Islamic State, or ISIS. The beheadings, rapes, and other acts of cruelty seem beyond understanding, as does the wanton destruction of priceless ancient monuments. Perhaps most mystifying of all is the way ISIS has been able to recruit young men — and even some young women — from the industrialized West, particularly Europe: the conventional wisdom is that the cure for ethnic and religious violence is “development,” education, and the opportunities provided by free markets. This seems not to be the case.

Because of the mainstream media’s narrow and often misplaced focus, it’s not surprising that most Westerners believe that religious extremism is primarily a problem of Islam. The fact is, fanaticism, fundamentalism, and ethnic conflict have been growing for many decades throughout the world.

Failure to recognize this trend can lead to the belief that terrorism is a product of nothing more than religious extremism and will end when secular market-based democracies are established throughout the world. Unfortunately the reality is far more complex, and unless we address the

underlying causes of conflict and terrorism, a more peaceful and secure future will remain elusive.

To really understand the rise of religious fundamentalism and ethnic conflict we need to look at the deep impacts of the consumer culture on living cultures throughout the planet. Doing so allows us not only to better understand ISIS and similar groups, but also to see a way forward that lessens violence on all sides.

For more than 600 years Buddhists and Muslims lived side by side in Ladakh with no recorded instance of group conflict. They helped one another at harvest time, attended one another’s religious festivals, and sometimes intermarried. But over a period of about

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15 years, tensions between Buddhists and Muslims escalated rapidly, and by 1989 they were bombing each other’s homes. One mild-mannered Buddhist grandmother, who a decade earlier had been drinking tea and laughing with her Muslim neighbor, told me, “We have to kill all the Muslims or they will finish us off.”

How did relations between these two ethnic groups change so quickly and completely? The transformation is just as unfathomable as the emergence of ISIS, unless one understands the complex interrelated effects of globalization on individuals and communities worldwide.

Throughout the world, globalized “development” generally entails an influx of external investments that are then used to build up an energy and transport infrastructure. This new infrastructure then shifts the locus of economic and political life from a multitude of villages and towns to a handful of large urban centers. This is what happened in Ladakh. Suddenly, villages that had previously provided food, energy, medicine, and skills born of generations of local knowledge were struggling to survive. They were no longer able to compete with the city, where subsidized imported food,

petroleum, pharmaceuticals, and designer clothes were available for the lucky few. The destruction of the local economy and culture by the global economy also created what can best be described as a cultural inferiority complex.

In Ladakh and elsewhere in the Global South, the economic pressures are reinforced by the media and advertising, whose images consistently portray the rich and the beautiful living an exciting and glamorous version of the American Dream. Satellite television now brings shows like *Sex and the City* to the most remote parts of the world, making village life seem primitive, backward, and boring by contrast. Young people in particular are made to feel ashamed of their own culture. The psychological impact on Ladakh was sudden and stark.

The undermining of cultural self-worth is an implicit goal of many marketers, who promote their own brands by imparting a sense of shame about local products. But it is not just local products that are denigrated by advertising and media images: it is local people as well. In Ladakh and around the world, the one-dimensional media stereotypes are almost invariably based on an urban, blonde, blue-eyed Western consumer model. If you are a farmer or are dark-skinned, you are supposed to feel backward and inferior. Thus, many dark-skinned women throughout the world use dangerous chemicals to lighten their skin and hair. These are profound acts of capitulation to a global social and economic order that offers material and social rewards to those who come closest to the West's commodified standards of beauty.

The Rise of Fundamentalism in Ladakh

In the past, Ladakhis would rarely identify themselves as Buddhists or Muslims, instead referring to their household or village of origin. But with the heightened competition brought by development, that began to change. Political power, formerly dispersed throughout the villages, became concentrated in bureaucracies controlled by the Muslim-dominated state of Kashmir, of which Ladakh was part. In most countries the group in power tends to favor its own kind, while the rest often suffer discrimination. Ladakh was no exception. Political representation and

government jobs—virtually the only jobs available to formally-schooled Ladakhis—disproportionately went to Muslims. Thus ethnic and religious differences—once largely ignored—began to take on a political dimension, causing bitterness and enmity on a scale previously unknown.

Young Ladakhis, for whom religion had been just another part of daily life, took exaggerated steps to demonstrate their religious affiliation and devotion. Muslims began requiring their wives and daughters to cover their heads with scarves. Buddhists in the capital began broadcasting their prayers over loudspeakers, so as to compete with the Muslim prayer call. In 1987 tensions between the two groups exploded into violence. This in a place where there had been no group conflict in living memory.

It may be surprising to some people to know that the Ladakhis most prone to violence were generally those with exposure to Western-style schooling. This feature of development—usually seen as an unequivocal good—pulled the young away from the skills and values most suited to life on the Tibetan Plateau, substituting instead an education suited to a consumer lifestyle that will lie forever beyond the reach of the majority. Battered

by the impossible dreams foisted on them by their schools, the media, and advertisements, many youth ended up unwanted, frustrated, and angry.

Ladakh's story is not unusual. The rise of divisions, violence, and civil disorder around the world are a predictable effect of the attempt to force diverse cultures and peoples into a consumer monoculture. The problem is particularly acute in the Global South, where people from many differing ethnic backgrounds are pulled into cities where they are cut off from their communities and cultural moorings and face ruthless competition for jobs and the basic necessities of life. In the intensely demoralizing and competitive situation they face, differences of any kind become increasingly significant, and tension between differing ethnic or religious groups can easily flare into violence.

Despite the clear connection between the spread of the global monoculture and ethnic conflict, many in the West place responsibility at the feet of tradition rather than modernity, blaming “ancient hatreds” that have smoldered beneath the surface for centuries. Certainly ethnic friction is a phenomenon that predates colonialism and modernization. But after four decades of documenting and

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The best long-term strategy to stop the spread of ethnic and religious violence is to reverse the policies that now promote growth-at-any-cost development.

What is needed is a shift away from globalization towards economic localization.

analyzing the effects of globalization on the Indian subcontinent, I am convinced that becoming connected to the global consumer economy doesn't just exacerbate existing tensions—in many cases it actually creates them. The arrival of the global economy breaks down human-scale structures, destroys bonds of reciprocity and mutual dependence, and pressures the young to substitute their own culture and values with the artificial values of advertising and the media. In effect this means rejecting one's own identity and rejecting one's self. In the case of Ladakh, it is clear that "ancient hatreds" didn't previously exist and cannot account for the sudden appearance of violence.

Lessening the Violence

The best long-term strategy to stop the spread of ethnic and religious violence is to reverse the policies that now promote growth-at-any-cost development. Today, free trade treaties—one of the prime engines of globalization—are pressuring governments to invest in ever larger-scale infrastructures and to subsidize giant, mobile corporations to the detriment of millions of smaller local and national enterprises.

Until about 500 years ago, local

cultures throughout the world were the products of a dialogue between humans and a particular place, growing and evolving from the bottom up in response to local conditions. Cultures have absorbed and responded to outside influences such as trade, but the process of conquest, colonialism, and development that has affected so much of the world is fundamentally different: it has forcefully imposed change from the outside. And since the end of World War II, the forces dismantling local economies have grown far more powerful. Today, speculative investment and transnational corporations are transforming every aspect of life—people's language, their music, their buildings, their agriculture, and the way they see the world. That top-down form of cultural change works against diversity, against the very fabric of life.

It is vital that we shift to a decentralized, less resource-intensive economic model immediately. But equally urgent is a shift in development policies for the less industrialized, less oil-dependent South, where a strategy based on decentralized, renewable energy would be far easier and less expensive to implement than continuing to pursue a centralized, carbon-intensive energy path. By improving conditions in villages, towns

and small cities, this strategy would also help stem the unhealthy tide of urbanization—the depopulation of rural areas that is structurally linked to corporate-led globalization.

What is needed is a shift away from globalization towards economic localization, along with what I call "counter-development"—efforts that increase self-reliance while providing information to balance the romanticized images of the consumer culture disseminated by western style schooling and the media.



Helena Norberg-Hodge is a pioneer of the localization movement, and the Founder and Director of the International Society for Ecology and Culture (ISEC), a non-profit organization concerned with the protection of both biological and cultural diversity.

She is also a member of Bhoomi's panel of advisors.

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A People's Curriculum for the Earth

At a time when it is becoming increasingly obvious that life on Earth is at risk, here is a resource that helps students and educators see what is wrong and help imagine solutions.

Bill Bigelow and Tim Swinehart write about their book on Education for a new age.

This book's origins may have been at an excellent teach-in sponsored by the International Forum on Globalization, called "Confronting the Triple Crisis," about climate change, the end of cheap energy, and resource depletion and extinction. A number of the contributors to this book made presentations at this extraordinary gathering: Vandana Shiva, Frances Moore Lappé, Bill McKibben, Michael Klare, and Jeff Goodell. We came away from that weekend convinced of the enormity of the crisis, but we also understood how each supposedly distinct crisis linked to all the others, and then tied back to the fundamental problem of a global economy driven by the quest for profit.

The decision to launch this book—and how we imagined it—was no doubt heavily influenced by the powerful and interconnected analyses offered by the speakers at this teach-in. But we were dismayed that there was no discussion about what this all meant for K-12 education. How should environmental justice movements partner with the educators who work daily with the millions of young people learning their

ecological A, B, Cs—or, perhaps too often, not learning them? Implicitly, the conference suggested that this was knowledge to be shared among adults. We left inspired and informed, but weighed down by the immense burden of figuring out how to "story" the environmental crisis through curriculum.

Back home we initiated what we called an "Earth in Crisis" curriculum

Yes, the "environment" is about polar bears, dolphins, redwood forests, and bees; but it is also about human beings—workers, consumers, families, and community members. We call this book a people's curriculum for the Earth because we try to keep the focus on the inextricable link between nature and people.

group, and invited colleagues to discuss and test out teaching ideas with one another. This collective nurtured many of the activities included in this book, and also identified key themes that weave through the book. One of these is that our curriculum must confront the false dichotomy between the environment and people. Yes, the "environment" is about polar bears, dolphins, redwood forests, and bees; but it is also about human beings—workers, consumers, families, and community members. We call this book a people's curriculum for the Earth because we try to keep the focus on the inextricable link between nature and people. And this suggests another theme that emerged in our Earth in Crisis curriculum work: Everyone on Earth is affected by the environmental crisis, but we are affected unequally—based on race, class, nationality, or location. This is maddeningly evident with the impact of climate change. Throughout the book we feature stories about individuals and communities—Matthew Gilbert and the Gwich'in (p. 74), Koleo Talaki in Tuvalu (p. 96), Anisur Rahman of Antapara,





**...we want students to recognize the power they have—
collectively or individually—to make the world a better place.
But it's wrong to direct students primarily toward individual
solutions to create change.**

Bangladesh (p. 98), the Aymara people of Bolivia (p. 137), the Yup'ik teenagers of Kwigillingok, Alaska (p. 143), and too many others to list, whose carbon footprint is virtually non-existent and yet who are among the first to suffer from its ravages.

This is not to say that people are not organizing in response to this toxic trespass, in the expression of ecologist Sandra Steingraber. They are. And some of them are featured in the book. But there is a fundamental inequality at the heart of the environmental crisis—one that is central to the articles and teaching activities included in this book.

Shorter Showers?

In our “Earth in Crisis” group, teachers kept returning to our students’ responses: They wanted to know what they could do personally. Early in our work, we concluded that we need to help students recognize the inadequacy of responding to the environmental crisis solely as individuals. As we mention in the teaching ideas for Chapter 3, “Facing Climate Chaos” (p. 174), there are entire books that urge students to consider their individual carbon footprints, suggesting that our personal patterns of consumption are a root cause of global warming. Students are urged to think about the frequency

of their baths, their electricity use, the stuff they buy. Yes, of course, we want young people — and everyone — to be mindful of the Earth as we go through our daily lives. And we want students to recognize the power they have—collectively or individually—to make the world a better place. But it's wrong to direct students primarily toward individual solutions to create change.

What happens to the Earth if we respect the “right” of the fossil fuel industry to manage their assets however they please? More and more, the headlines are filled with the answer to that question: superstorms, drought, heat waves, melting glaciers, ocean acidification, species extinction, floods, drowning islands. A curriculum on the climate, and the environmental crisis more broadly, needs to address patterns of ownership and decision making. Our curriculum needs to confront the myth that private property is, in fact, private. The fate of the Earth “belongs” to us all.

Capitalism

Helping students acquire a critical consciousness about the environmental crisis means we need to consistently encourage them to ask “Why?” Why is it that the future of life on Earth has been put at risk? It seems an impossible question to answer unless we engage students in thinking about the nature of

global capitalism. Throughout the book, we draw students’ attention to this broader systemic context within which the environmental crisis is unfolding. Activities like “The Thingamabob Game” (p. 147) and the trial role play, “Who’s to Blame for the Climate Crisis?” (p. 163), explicitly confront students with the fundamental clash between an economic system that prizes wealth accumulation above all else and people’s need for a healthy environment. If we’re going to help our students not just describe, but explain, the environmental crisis, it is essential that educators name this elephant in our classrooms.

Joy Amid Crisis

The new IPCC report warns that at least three-quarters of known fossil fuel reserves must remain in the ground if we are to avoid a 3.6 degree Fahrenheit (2 degree Celsius) rise in global temperatures over pre-industrial times (see “The Mystery of the Three Scary Numbers, p. 180 and “A Matter of Degrees,” p. 192).

The news is bad. But despite the dimensions of the environmental crisis, students can approach this frightening content in ways that are lively and playful. As with adults, we’ve found that students are able to live with contradiction; students grasp the sadness and injustice at the heart of the environmental crisis while finding joy and humor. For the book, we’ve selected activities that address key environmental concerns, but these activities do not invite despair. They are engaging, and feature collective work that triggers student playfulness and imagination.

Interconnections

Despite the fact that La Vía Campesina may be the largest social movement in the world—with more than 200 million small farmers in its affiliated organizations—it’s pretty much impossible to find its work described in today’s mainstream textbooks. We conclude *A People’s Curriculum for the Earth* with La Vía Campesina’s efforts because we think that it highlights the way a deep response to any one crisis—for example, how to feed a world populated by perhaps a billion hungry people—addresses other social and environmental crises.

La Vía Campesina’s presents

a grassroots, “agroecological” challenge to agribusiness’s globalized, free market, chemical-drenched, genetically modified prescription for the world’s food production. The peasant movement shows that addressing hunger can simultaneously address climate change, inequality, public health, unemployment, forced migration, and much more. These are the kind of interconnections that infuse our curricula with hope — offering students the sense that fundamental change is not only desperately needed but also possible.

Challenging Curricular Apartheid

The teaching we observed at Sunnyside Environmental School showed us what happens when teachers collaborate across disciplines. Unfortunately, in too many schools, the environmental crisis seems to have become a kind of curricular hot potato. No discipline wants to claim the crisis as its own. We get it. But in this moment of crisis, it’s imperative that we reject artificial barriers between disciplines. Throughout this book we’ve featured stories from educators who consciously cross conventional curricular boundaries—see for example, “Carbon Matters” (p. 110), “Science for the People” (p. 273), “Measuring Water with Justice” (p. 297), and “Facing Cancer” (p. 309). Throughout the curriculum, educators can collaborate to help students become the scientist-activists they need to be. Confronting the toxic injustice that has become one of the defining features of our time requires us immediately to begin constructing a fossil fuel-free world built on principles of ecology and justice, rather than profit and endless growth. No matter which classes we teach, educators need to find ways to help young people develop the analytical tools to understand the causes of the environmental crisis and to exercise their utopian imaginations to consider alternatives.

Political and Educational Context

At the precise moment we need our schools to educate and engage the next

This book is not so much “a people’s curriculum for the Earth” as it is an invitation to begin to build that curriculum. And it’s encouragement to educators to demand the right to effect a curriculum that honestly and deeply addresses the environmental crisis. The intertwined social, economic, and environmental crises that confront humanity require us to be audacious.

generation about the historic global challenges we face, public education is under attack from the same private and corporate interests that have polluted our natural and social environments. Curriculum is being standardized and narrowed to what can be poorly measured by bubble tests. Decisions about what schools should teach and children should learn are being moved away from classrooms and communities to the same politicized bureaucracies and monied interests that are undermining democracy. This too is “bad timing.”

At a time when we need an urgent national conversation about how schools and curriculum should address the environmental crisis, we’re being told that the problems we need to focus on are teacher incompetence, government monopoly, and market competition. The reform agenda reflects the same private interests that are moving to shrink public space—interests that have no desire to raise questions that might encourage students to think critically about the roots of the environmental crisis, or to examine society’s unsustainable distribution of wealth and power.

This book is not so much “a people’s curriculum for the Earth” as it is an invitation to begin to build that curriculum. And it’s encouragement to educators to demand the right to effect a curriculum that honestly and deeply addresses the environmental crisis. The intertwined social, economic, and environmental crises that confront humanity require us to be audacious.

As Naomi Klein writes, this is “the fight of our lives.” For educators, this

is the curriculum work of our lives. And, yes, it is a fight, too. We need to demand and organize for the right to teach about what really matters, and not be forced to toe the textbook line or obey “rigorous” standards, developed afar, that may or may not help students appreciate and act on this moment in history.

We educators need to imagine, cooperate, create, hope—and at times, defy and resist. And we need to see ourselves as part of a broader movement to build the kind of society that is clean and just and equal and democratic. One that seeks to leave the world better than we found it.

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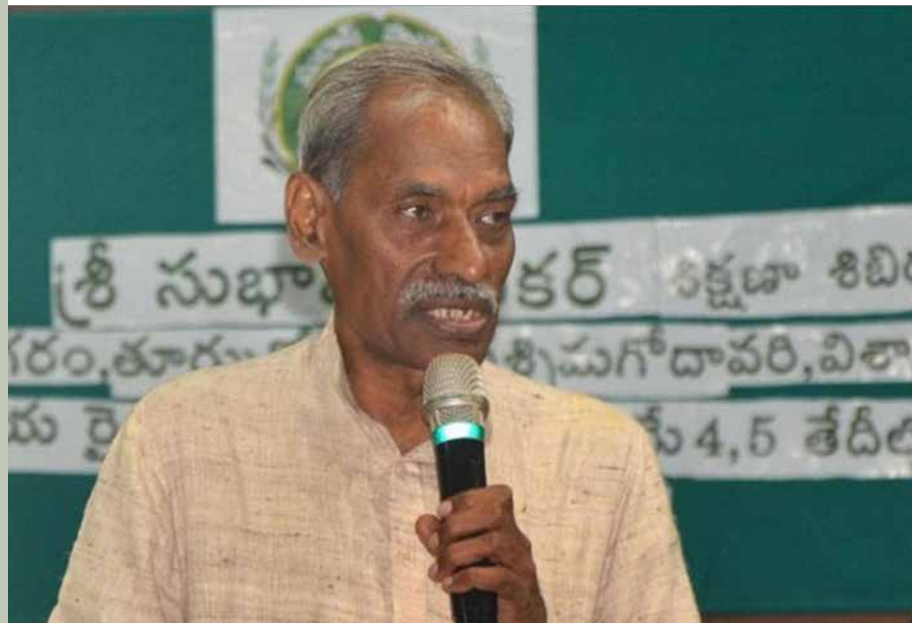


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Bill Bigelow has taught high school in Portland, Oregon since 1978. He is an editor of the education reform journal, *Rethinking Schools*, and is the author of *Strangers in Their Own Country: A Curriculum Guide on South Africa*.

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Subhash Palekar: the Farmer who was awarded the Padmashree

Manu Sharma writes about this inspiring farmer who persisted in his experiments that led to his methods of Zero Budget farming and freely shared them with others

Last month I was delighted to learn that Subhash Palekar has been bestowed with a Padmashree, one of India's highest civilian honours. The award may not be always well deserved, but in this case, it is hard to think of a more deserving candidate. Palekar is a farmer-scientist and a natural farming crusader. He is also someone who has done the most to mitigate India's greenhouse gas emissions and is least recognised for it.

The news was personally gratifying as I have known him for past five years and follow the practices he developed. From farmer to national treasure, he has had an interesting journey.

Dedication and Propagation

Until three decades ago, Subhash Palekar was no different from any other farmer. He worried about the declining productivity of his land despite his following the recommendations of agricultural scientists. Rather than feeling helpless like any other farmer would, Palekar devoted the next decade to research to figure out on his own a solution to his problem.

For years, he studied forests and carried out experiments in his farm to replicate and accelerate the natural processes that take place in a forest. By the end of the decade, he perfected a simple, no-expense method of cultivation that did not require any chemicals. In fact, just as in a forest, his techniques required no external inputs whatsoever. All inputs could be supplied

from the land itself or found around it. Still, this 'Zero Budget' method gave tremendous results. All farmers try to improve upon their practice, but few conduct research projects in their farm, formally and rigorously. Fewer still would do what Palekar did next. Over the two decades that followed (1996-2016), he made it his life's mission to share his techniques with fellow farmers around the country without expecting anything in return.

Palekar first tried to propagate his methods through a regional agricultural magazine. Many accepted them wholeheartedly but Palekar was not satisfied with the pace of change. He then took to writing books himself, in several regional languages, describing his techniques. Travelling across Maharashtra and other states, he started training farmers in his methods for free at workshops that lasted from two days to several. The only income

sustaining him was earned through the sale of his books, nominally priced so that everyone could afford them. Today millions of farmers practice his techniques.

Palekar's methods have gained widespread acceptance because they are easy to adopt and his training sessions include detailed instructions (he actually dictates them word by word!). Other organic/natural farming practices that may be equally effective or even more so have been relatively less successful in gaining widespread acceptance because they often place a lot of demands on the farmer. Some require him to drastically change cultivation practices, others require extensive labour or externally derived inputs. Zero Budget Natural Farming, on the other hand, has relatively lower barriers to entry.

Misunderstood

One thing one quickly comes across after meeting Subhash Palekar or listening to his talks is his passion for the topic despite a mild mannered way of speaking. This also reflects in his writings. At the same time, he is not very articulate when speaking in a language (usually English or Hindi) other than his native tongue (Marathi). This is an unfortunate combination and sometimes leads to misunderstanding.

The English language version of the books and his website are of atrocious editing quality. Palekar acknowledges this in the books but refuses to yield

There's a lesson in Palekar's story more significant than the national award he won. Palekar hails from the drought-prone Vidarbha region in Maharashtra which has 21% of the state's population but is responsible for 70% of farmer suicides. Yet, he transcended the conditions that were given to him.

to the editor's pen. He argues that the books are meant for farmers and not as literature. One unfortunate outcome of this is that many in the English speaking world are quick to reject his ideas without understanding them. Therefore, there is little mention of his work in the English language media, although vernacular media in South India, especially the TV channels, have covered him extensively.

Palekar tends to be a polarising figure even among those who promote organic farming in the country. The Organic Farming Association of India (OFAI) – a leading body of the organic farming movement does not acknowledge his work directly anywhere on its website, except in the news feed. Even the list of organic farmers in the state of Maharashtra in the website's 'resources' section finds no mention of his work.

This, again, in my view, arises out of a misunderstanding of Palekar's ideas. In his talks he comes down heavily against agricultural universities for promoting chemical farming. This is understandable. What is less clear to most people is that while promoting his own version of "natural farming" Palekar even criticises promoters of "organic" farming equally strongly. He actually abhors the term 'organic'.

This has to be understood in a context. In the early days of the movement, agricultural universities and government literature on organic farming used to encourage extensive inputs that must be purchased from the market. What Palekar is actually against is this reliance of the farmer on the market. He argues that the corporates and the government conspire to keep exploiting the innocent farmer like they did during the so-called Green Revolution by promoting chemical fertilisers and hybrid seeds.

Gandhian Ideology

This view, although far-fetched, is not without merit. Palekar is a student of Gandhi and his ideology is strongly rooted in Gandhi's idea of village self-reliance. A core idea in his ideology therefore is that farmer should not rely on any external inputs but create his own. It is due to his poor articulation abilities that his talks come across as if he is against all organic farming proponents.

There is no patent in Subhash

He reached out to the farmers. Met them in person, and trained them in his cultivation practices. Hundreds of thousands of farmers have been trained by him and he continues to spread awareness and hold workshops.

Palekar's name and no company where he serves as chief executive. He did not form an NGO with lofty aims that sought international funding. He never charged high fees for his workshops. There were no protest rallies led by him which demanded end of fertiliser subsidies. No online petitions were filed either to stop application of harmful pesticides. He did not form a people's movement. Nor did he plead with the government to popularise his natural farming method. He did not spend hours on social media criticising and ridiculing the government, corporates, or the entire human race.

This is not to imply that all of those ways to serve a cause are meaningless. Palekar took a more direct route instead. He reached out to the farmers. Met them in person and trained them in his cultivation practices. Hundreds of thousands of farmers have been trained by him and he continues to spread awareness and hold workshops.

Shared Outcome

Millions today have access to food that is free from chemical contamination. Hundreds of thousands of acres of land has been renewed with organic carbon being returned back into the soil. Soil that was being depleted year after year with chemical inputs is now thriving with untold amount of microbial life – bacteria, fungi, protozoa and nematodes – that is raising its fertility. India today stands at a privileged position where organic food market is witnessing the highest rate of growth in the world – an astounding 20-22%. Subhash Palekar has a notable role in this.

Climate Crusader

One less well understood benefit of organic farming is its role as carbon sink. When a farmer cultivates land organically the organic content of soil rises. This reduces greenhouse gas emissions that contribute to climate change. The amount of carbon that

can be sequestered this way is so high that according to The Rodale Institute, "we could sequester more than 100% of current annual CO₂ emissions with a switch to widely available and inexpensive organic management practices."

If that is true then by helping convert several hundred thousand farmers across the country to organic farming, Subhash Palekar has done the most to mitigate India's greenhouse gas emissions. That he is least recognised for it is reflective of the state of our media and its role as reporter of science.

There's a lesson in Palekar's story more significant than the national award he won. Palekar hails from the drought-prone Vidarbha region in Maharashtra which has 21% of the state's population but is responsible for 70% of farmer suicides. Yet, he transcended the conditions that were given to him. He achieved this because he focused on creation rather than criticism, on what is possible rather than what is not.

In this lies a lesson for those who spend their lives in negativism. In feeling helpless and dejected. In hate-mongering on social media and elsewhere. *Ringed Cedars*, the series of books that have taken Russia by storm and sparked a massive back-to-the-land movement in that country and elsewhere, say that each man is born a sovereign. We have been provided with all the answers inside us. That regardless of our inheritance, our upbringing, the politics, climate, and social circumstances in which we find ourselves, we have been provided with the capacity to transcend them and create a world in which we wish to live. Subhash Palekar is a living embodiment of this idea.



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Image used is a Youtube video screenshot.



Gluten : A Gut Feeling

Dr. Joseph Michael Mercola looks at the stickiness surrounding gluten and details how food processing in general contributes to poor health.

In recent years, the benefits of a gluten-free diet have become widely recognized, its popularity fueled by celebrity endorsements and an increasing number of books.

What is Gluten?

Gluten is a protein made up of glutenin and gliadin molecules, which in the presence of water form an elastic bond. Gluten is most commonly found in wheat, rye and barley.

Gluten can also be found in countless processed foods without being labeled as such. For example, gluten can hide under a variety of labels, including the following:

- Malts
- Starches
- Hydrolyzed vegetable protein (HVP)
- Texturized vegetable protein (TVP)
- Natural flavoring

Celiac.com has a long list of label ingredients that typically contain hidden gluten.

How Gluten may Damage Your Health

The word "gluten" comes from the Latin word for glue, and its adhesive properties hold bread and cake together. Bread makers may also add extra gluten in order to create a more spongy texture.

But those same "binding" properties also interfere with the breakdown and absorption of nutrients, including the nutrients from other foods in the same meal. The result can be likened to a glued-together constipating lump in your gut, which can impede proper digestion.

The undigested gluten then triggers your immune system to attack the

lining of your small intestine, which can cause symptoms like diarrhea or constipation, nausea and abdominal pain.

Over time, your small intestine becomes increasingly damaged and inflamed. This in turn can lead to malabsorption of nutrients and nutrient deficiencies, anemia, osteoporosis and other health problems.

The condition can also cause a wide array of other symptoms that are not gastrointestinal in nature, including neurological or psychological problems, and problems related to the skin, liver, joints, nervous system and more.

Wheat has Changed Dramatically

Wheat is one of the most widely grown crops in the world. But the wheat of today is vastly different from the wheat our ancestors grew and ate. This is likely part of the explanation as to why celiac disease and gluten intolerance have risen four-fold since the 1950s.

The proportion of gluten protein in wheat has increased enormously as a

Two explanations for the rise in gluten intolerance have to do with how wheat is milled and bread is baked these days. The way we mill wheat changed significantly with the advent of modern food processing.

result of hybridization. Until the 19th century, wheat was also usually mixed with other grains, beans and nuts; pure wheat flour has been milled into refined white flour only during the last 200 years.

The resulting high-gluten, refined grain diet most of you have eaten since infancy was simply not part of the diet of previous generations.

How Gluten Triggers Leaky Gut

Research suggests the human gut views gluten as a foreign invader against which it must mount an immune response. However, that doesn't mean everyone must avoid gluten. Most people can handle gluten without clinical consequence. Others are not so lucky.

In essence, it makes your gut more permeable, allowing food particles to escape into your bloodstream, causing inflammation, immune reactions and raising your risk of various autoimmune disorders. This is known as leaky gut syndrome, and you don't have to have celiac disease to suffer the consequences of leaky gut.

Glyphosate — one of the most widely used herbicides in the world and an active ingredient in Monsanto's Roundup — has been shown to severely damage your gut flora and cause chronic diseases rooted in gut dysfunction. It's actually patented as an antibiotic.

In March 2015, the International Agency for Research on Cancer (IARC), the research arm of the World Health Organization (WHO), determined glyphosate is also a "probable carcinogen" (Class 2A).

You may not have realized this, but desiccating non-organic wheat with glyphosate just before harvest became popular about 15 years ago. When the mature wheat is exposed to a toxic chemical like glyphosate, it releases more seeds. This results in slightly larger yield, which is why most wheat farmers do it.

But it also means that most non-organic wheat — and all the processed foods that contain it — is contaminated with glyphosate. And we now know this may have serious health ramifications.

Not only does the glyphosate seriously impair the villi in your gut, it also inhibits a process that normally helps your body digest wheat proteins.



In my experience, nearly everyone benefits from avoiding grains, even whole sprouted grains, whether you have a gluten intolerance or not, and that's because grains have high net carbs and avoiding them will help improve your mitochondrial function.

The gliadin in gluten is difficult to break down and digest. Normally a reaction takes place that builds connections between different proteins in the wheat.

Panification and Wheat Milling - 2 Additional Culprits

Two explanations for the rise in gluten intolerance have to do with how wheat is milled and bread is baked these days. The way we mill wheat changed significantly with the advent of modern food processing.

The endosperm and the starch are roller milled, but all the other ingredients are first extracted and then added back in at varying proportions, depending on the requirements of the end product. What you end up with is highly refined wheat flour that is more likely to cause GI problems. Whole grain flour is made by grinding the whole grain using a stone mill. Nothing is taken out and nothing is added in. The end product contains the entire grain, hence the term "whole grain." The process is much simpler and less destructive to the nutritional content of the grain.

While whole grain bread still contains gluten, it might not cause as severe a problem if you don't have celiac disease. Some believe the problems attributed to gluten may in fact be related more so to the chemicals used during the processing of refined wheat flour, than to gluten itself.

"Panification," referring to the process of baking bread, has also undergone dramatic changes. In the

past, flour was mixed with water and yeast, and the dough was then left to rise overnight. This process allowed enzymes in the yeast to break down the gluten. Your body lacks these enzymes, and cannot replicate this breakdown process.

Today, bread makers no longer let dough rise for up to 18 hours. The addition of various chemicals has cut down the process to about two hours, which is not long enough for the gluten to be broken down. Hence, most bread today contains far more indigestible gluten than breads in the past.

In my experience, nearly everyone benefits from avoiding grains, even whole sprouted grains, whether you have a gluten intolerance or not, and that's because grains have high net carbs and avoiding them will help improve your mitochondrial function. Impairing mitochondrial function can exacerbate health problems related to insulin resistance, such as overweight, high blood pressure, type 2 diabetes, and more serious problems like heart disease and cancer.



Joseph Michael Mercola is an alternative medicine proponent, osteopathic physician, and web entrepreneur.

Images courtesy creative commons/flickr.

Gluten free Recipes

BAJRA ROTI

Ingredients

- 2 cups Bajra flour
- 3 tbsp finely grated carrots
- 4 tbsp finely chopped onions
- 3 tbsp finely chopped coriander
- 1 tsp red chilly flakes
- 1 tsp sesame seeds
- 4 tbsp Gongura (Rosella) finely chopped leaves
- 2 tsbp Amchur powder
- Dry Bajra flour for rolling roti
- Ghee or oil for cooking
- Hot water
- Salt



Instructions

- Mix all dry ingredients in a bowl
- Add salt to taste
- Pour sufficient hot water over the mixture
- Knead it to a soft dough
- Take a small quantity of dough using dry powder roll or flatten it into thin roti
- Cook it on the tawa using ghee/oil till it turns golden brown
- Serve it with chopped onion and sweet and sour green chillies

BANANA NEER DOSA



Ingredients

- 1/2 cup raw rice (unpolished)
- 1/2 coconut

Filling

- 2 bananas
- 1/4 cup jaggery
- 12-16 dates chopped
- cinnamon powder
- finely chopped (walnut, almonds, cashews or mixed)
- 1 tsp flaxseeds roasted
- 1 tsp roasted sesame seeds

Instructions for the Batter:

- Soak rice for 3 hours, grind finely with coconut
- Keep overnight or for atleast a couple of hours
- This batter should be slightly thinner than the usual dosa - mix
- Heat the tawa and on low flame, smear a tsp of oil and spread it evenly with a cut onion.
- Then spread the batter to the tawa to make thin dosa.

For the filling

- Blend dates with jaggery and banana. Mix flax seeds and add roasted sesame, cinnamon powder to the filling. Add this filling to the dosa roll and serve hot.
- Other variations like grated coconut with jaggery syrup or modak filling can also be used.

MINI FOXTAIL KODUBU

Ingredients

- 1 cup foxtail millet flour
- 1 cup hot water
- salt to taste

Seasoning

- 1/4 cup finely grated coconut
- 1 sprig of curry leaves (chopped)
- dry red chillies
- 2 tbsp groundnut coarsely crushed (optional)
- 1/4th tsp mustard seeds
- 1 medium sized onion chopped
- 2 tbsp oil
- salt to taste

Instructions

- Mix flour, hot water and salt
- Knead to a soft dough
- Take small portions of the dough and roll it cylindrically to 1 cm diameter
- Cut the rolled length into small pieces(as big as peanuts)
- Shape the cut pieces into small balls
- Steam cook the mini balls for 15 minutes, remove from the stove and keep them aside
- Heat the oil in a kadai. Add mustard seeds and allow it to crackle. Add curry leaves and then the rest of the ingredients. Saute until it turns golden brown. Add salt to taste and stir well.
- Finally add steamed kodubu, stir well for a minute.
- Serve it hot with chutney.

Variations

- Instead of making mini kodubu, the dough can also be flattened into strips and steamed.
- Prepare sauce out of tomato puree and add steamed mini kodubu or strips into it.



MILLET UTTHAPPAM

Ingredients

- 1 cup foxtail millet
- 1 cup kodu millet
- 1 cup little millet or any one variety
- 1 cup black gram daal
- 1/4 cup rice flakes
- 1 tsp fenugreek
- Salt to taste
- Oil



Instructions

- Soak the millets, daal and fenugreek for 4 hours
- Add rice flakes after 3 hours
- Grind millets, daal, fenugreek and rice flakes to a smooth batter
- Allow it to ferment overnight atleast for 8 hours
- Next day, mix well with water and salt
- Dilute it to a thick consistency for it to be spread on the tawa.
- Heat the tawa and smear oil, using a chopped onion.
- Spread the batter on the tawa
- Add a tsp of oil or ghee around it
- Cover it with a lid (leave it on the tawa for about 2 mins on a reduced flame)
- Serve it with spicy onion/ coconut chutney.



Pushpa is a Facilitator with Bhoomi College. She is passionate about working on the land, saving and distributing seeds, enriching the soil, and making organic fertilisers and biopesticides. She is well-versed in healing through home remedies, and enthusiastic about cooking and sharing her recipes with others.
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02 October 2016

Bhoomi Utsav

15 October 2016

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(for children)

15 October 2016

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@ Bhoomi Farm

November 2016

5-6 November 2016

Trek in Sharavathi Valley

19 November 2016

Story Telling (for children)

26 November 2016

Connectng with Nature

through Theatre

26 November 2016

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@ Gumalapuram

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03 December 2016

Organic Gardening

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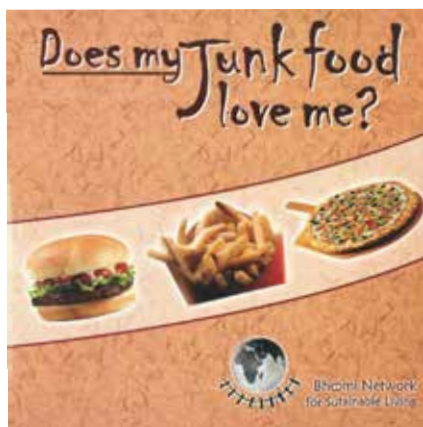
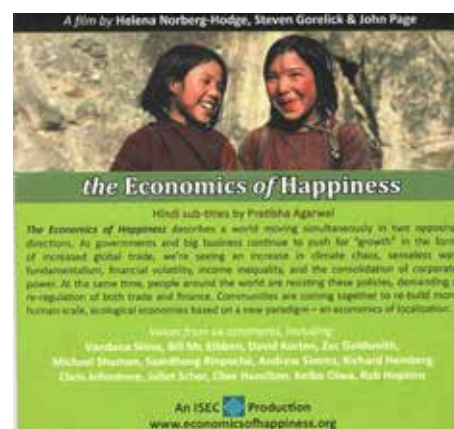
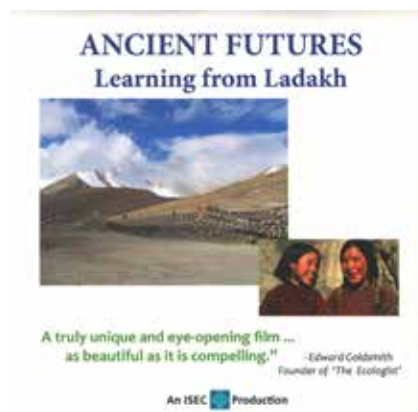
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