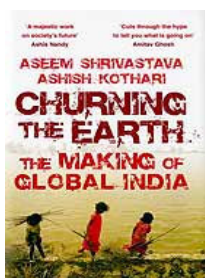


Centre for Studies in Science Policy

CSSP SEMINAR SERIES

Book Discussion with the Authors



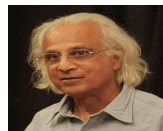
**Churning the Earth:
The Making Of Global India** *Aseem Shrivastava & Ashish Kothari*

CHURNING THE EARTH takes a comprehensive view of development under conditions of “globalization” in India. While acknowledging the impressive economic growth rates of the last few years, the book questions whether such growth is socially, politically and ecologically sustainable. The book discusses concrete alternatives to current policies and practices, and argues that fundamental political reform is needed towards a radical ecological democracy.

On the Authors

Aseem Shrivastava is an ecological economist with a doctorate from the University of Massachusetts. He has written extensively on themes associated with globalization.

Ashish Kothari is a well-known environmentalist with decades of research and activism behind him.



The Discussant will be Dunu Roy

(Anubrotto Kumar Roy popularly known as Dunu Roy is a Chemical Engineer by training, social scientist by compulsion and political ecologist by choice)

Venue : Room Number 227, CSSP, SSS-I

Time: 4.30 pm

Date: February 12th, 2013

Radical Ecological Democracy

A photograph of a large group of people, including men, women, and children, holding hands in a long line across a rocky riverbank. The scene is set at sunset, with the sun low on the horizon, casting a warm glow over the water and the sky. The people are dressed in simple, everyday clothing. The river is calm, and the background shows a line of trees and hills under a cloudy sky. The overall mood is peaceful and communal.

Escaping India's Globalisation Trap

All over the world, nature's mighty barriers separate oil, gas, minerals and water from their destinations. Only a handful of international giants can bridge these gaps. One of them is Indian. Dodsal. Ripping through jungles in Indonesia... Moving the earth in India... Laying pipelines.

The Indonesian oil/gas pipeline (X-52 pipe Diameter's upto 60 cm.)
A section of the 58 kilometre oil-gas pipeline was laid across 14 kilometres of high swamping terrain. Because of its proximity to the ocean, the swamping water level was governed by the tides... rising and falling as much as 3 metres. Equipment mounted on barges dug the pipe trench below the swamping bed. As the barges rose and fell with the varying tides, continuous changes were made to adjust to the varying levels of swamping water. Pipe sections were then floated across the swamps, sunk, and buried below the swamping bed. Dodsal had to bend the pipes to follow the sharp contours of swamps encountered en-route. Hoisting the Indian flag worldwide. In the last 12 years, Dodsal has emerged as a major international force in cross-country pipelines. 58 projects in Europe, Asia, Africa, South East Asia and the Middle East. Including turnkey projects. 15,000 kilometres of pipelines... more than halfway round the earth. Equipment bases in Singapore, Baroda and Mumbai. Training schools in Dortmund (Germany) and Baroda. A mobile task force of 900 engineers and 3,500 highly-trained technicians. The track record. 58 countries through the most hazy, misty, obstacles, monsoon, desert, fever, jungle and swamps. 7 new projects completed or in progress. In 1978, Dodsal built India's first-ever, costly pipeline for the Kudremukh project in Karnataka. The pipeline was just the third of its kind in the world. Dodsal is one of the very few companies with in-house capabilities for working rivers and floating through deep. Dodsal's rock blasting experience has been signed by Sino Japan, Sweden.

Activities in water supply systems
Dodsal undertakes raw water and water treatment packages for a variety of clients. Each project has not been completed in time. This project involved drawing water from the Ghats at Noida and then pumping it into 1,000,000 LPH storage tanks, and building treatment for transportation. Dodsal's involvement in the area includes high engineering and safety in building water storage, purification plants, and pipelines. Other divisions: Generation and maintenance, Transmission power, Civil engineering, Offshore services, Piping.

Dodsal
The Indian hand... worldwide.

Today's vision of 'development'

Violence against nature, people, and cultures

Ministry of Rural Development
Government of India

Nation's Development
through
Village Development
... this is our dream

Main Schemes run by Ministry of Rural Development

1. Mahatma Gandhi NREGS (MGNREGS)
2. National Rural Livelihood Mission
3. Pradhan Mantri Awasz Yojana
4. India Awasz Yojana
5. National Social Assistance Programme
6. Integrated Watershed Management Programme

For more information, please visit our web site www.mrd.gov.in

Heartiest Greetings to all fellow Indians on Republic Day of India

Economic globalisation: intensified development violence

1991-onwards...

- Trade (export-import) liberalisation
- Foreign direct investment
- Delicensing / single window clearances
- Privatisation



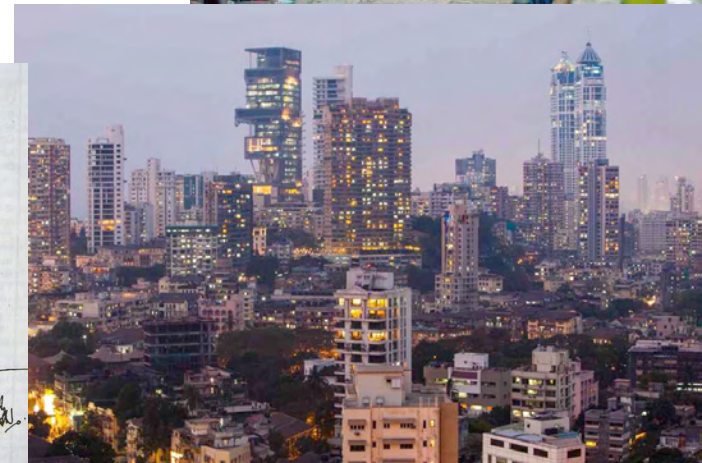
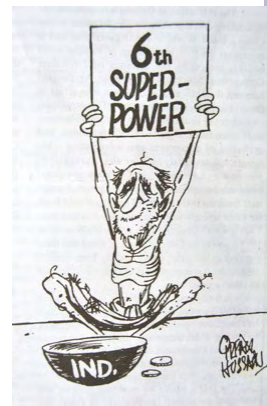
India's ecological deficit (mirroring world trend)

- World's third largest ecological footprint
- Using twice what can be sustained by our natural resources
- Decline in capacity of nature to sustain us, by almost half

(Global Ecological Footprint and CII, 2008)

Impacts: India's 'development' refugees, growing inequities

- 'Development' has dispossessed many millions of land, water, natural resources, livelihoods
- Over 60 million displaced in last 50 years (over 40% adivasis)
- Population below poverty line: 38 to 55%
- World's largest no. of malnourished children
- Disproportionate -ve impact on women
- Uncontrolled consumerism by elite
- **Wealth inequities**
*



India the new Coloniser (joining China, Japan...)

Karaturi Global: 360,000 ha. in
Ethiopia for floriculture,
sugarcane, palm oil, etc

Eurovistaa: 10,000 ha. in
Tanzania for cotton, 55,200 ha in
Indonesia for palm oil

India (& China, etc) on the path
of 'globalised development'?



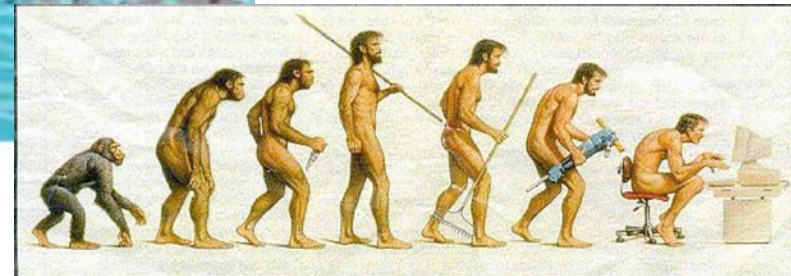
Gandhi:

'if India to take Britain's
path of 'development', it

If something is fundamentally wrong with development model, do we have alternatives?



THE SHIP OF FOOLS AND THE ROCKS OF SHORT-TERM ECONOMIC PLANNING



Somewhere, something went terribly wrong

Towards alternatives: **Radical Ecological Democracy**



Two imperatives....

- **Ecological security** (ecosystems, species, populations, ecological functions...)
- **Livelihood security** (esp. of those most directly dependent on ecosystems and natural resources)



Towards tribal self-rule, with conservation: Mendha-Lekha (Maharashtra)



All decisions in *gram sabha* (village assembly);
no activity even by
government officials
without sabha consent



Informed decisions
through monitoring, and
regular study circles
(*abhyas gat*)

Conservation of 1800 ha forests, now with full rights under Forest Rights Act

Earnings from sustainable NTPF use (over Rs. 1 crore in 2011-12), and use of govt schemes towards:

- Full employment
- Biogas for 80% households
- Computer training centre
- Training as barefoot engineers

Community Forest Rights (FRA)

Several hundred claims accepted in Maharashtra (>6 lakh acres), Odisha (>70,000 acres) & Andhra

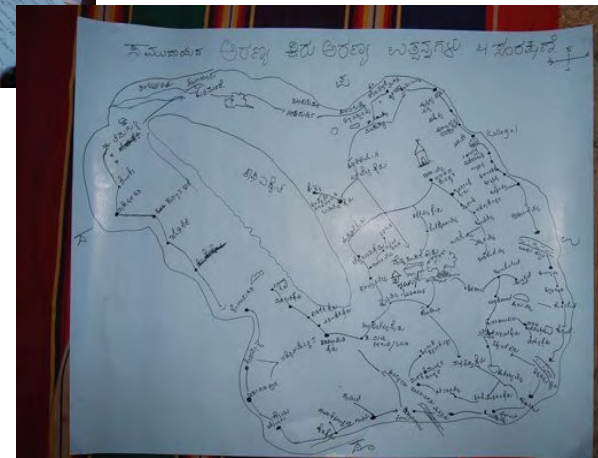


126,998 acres in Baiga chak, MP



Assertion of CFRs against industrial projects (e.g. POSCO), mining (e.g. Vedanta), logging (e.g. Baigachak), plantations (Odisha)

Biligiri Rangaswamy Temple Sanctuary & (illegal) Tiger Reserve, Karnataka



Community Forest Resource titles to Soliga, over half of sanctuary; community-based wildlife/tiger conservation plan process initiated

The background of the image is a dense, grid-like arrangement of numerous small, rectangular samples of different agricultural products. These include various types of grains such as rice, wheat, and corn, as well as different varieties of beans and seeds. The colors range from light beige and tan to dark browns, greys, and blacks, creating a rich, textured visual field. The text is centered over this collage.

**Food security:
sustainable agriculture**

Deccan Development Society (AP): integrating conservation, equity, & livelihoods through sustainable agriculture

Reviving traditional diversity, promoting cultivated and wild foods

- Creating community grain banks
- Empowering women/dalit farmers, securing land rights
- Creating consumer-producer links (Zaheerabad org. food restaurant)
- Linking to Public Distribution System



An individual revolutionary...

Natwar Sarangi

Narishu vill, Cuttack dist, Odisha



Growing 360 varieties of rice



	KALA YUJARI	PHASKAMBI	OBBI CHENI
1. Name of the Variety			
2. Source of Seed			
3. Village	Konark	24 Pargana	Sabarika
4. District	Puri	East Medinipur	Med
5. State	Orissa	West Bengal	Cuttack
6. Soil	Coastal saline	Barren Saline	Coarse
7. Geographical Region of Origin			Central Plain
8. Basic Characteristics			
a. Crop Duration (No. of days)	145	140	145
b. Height of the plant (Meters)	1.75	95	1.2
c. Height of the Panicle (cm.)	12	14	9
d. Length of the Panicle (No.)	23	23	21
e. Length of the Panicle (cm.)	205	205	190
f. Grains per Panicle (No.)			
9. Agronomic Features			
a. Land Type (Low/Med/Up)	Low & Med	Med	Low & Med
b. Broadcasting Transplanting	30	Transplanting	30
c. Seedling Transplanting	30	30	30
d. Period of sowing (kg/Acre)			
e. Period of sowing	June 1-15	June 1-15	May 15-30
f. Period of sowing	Days	Days	Days
g. Water Requirements	81 cm	81 cm	81 cm
h. Seed Rate			
i. Transplantation Duration	4	4	4
j. Up to Panicle Formation	4	4	4
k. After Panicle Formation	4	4	4
l. Soil Grain Filling			
m. Period of flowering (From Date of Sowing in Days)	100	95	100
n. Drought/Flood/Cold/Heat Tolerance			
10. Harvesting/Threshing Features			
a. Period of Harvesting			
b. Threshing			
c. Year to Year (G/Acre)			
11. Special Features			
a. Colour of Panicle			
b. Colour of Rice			
c. Length of Grain (mm)			
d. Culm Preference			



Seed albums and banks

GenX: Jubraj Swain

A photograph of a river with white water rapids flowing over dark, mossy rocks. The water is turbulent and white with foam, contrasting sharply with the dark, wet rocks. The background shows a dense forest of green trees and foliage.

**Water security: decentralised
harvesting & distribution**

Arvari Sansad (Parliament), Rajasthan: water and food security through landscape governance





Livelihoods and jobs



Economic democracy...

Livelihood security through community-led cooperatives, self-help groups, producer companies:

Dharani, Andhra Pradesh; Kachchh Mahila Vikas Sanghatan / Kasab, Gujarat; Nowgong APCL, Madhya Pradesh; Nyoli, Uttarakhand; Swachh, Pune; Aharam Traditional Crop Producer Co., Tamil Nadu)





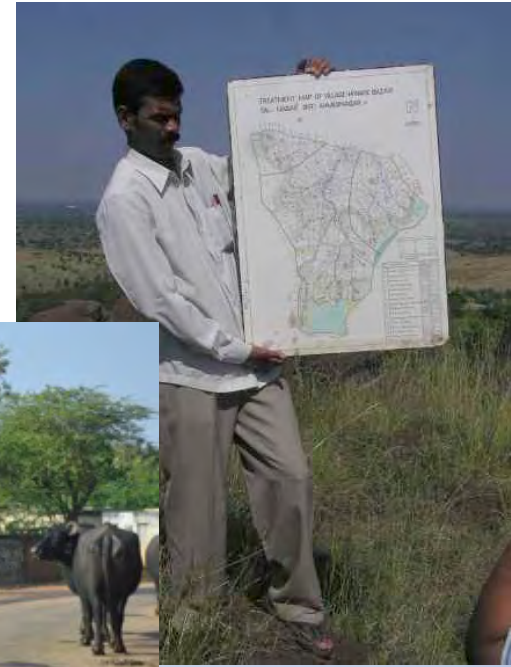
The Village and the City ...



Gram swaraj:

outmigration is *not* inevitable

Ralegan Siddhi and Hivare Bazaar
(Maharashtra), Kuthambakkam (TN)



Towards sustainable cities

Bhuj (Kachchh):

reviving watersheds

decentralized water storage and management system

solid waste management

livelihoods for poor women

adequate sanitation



Bhuj (contd):
dignified housing for the poor
building capacity amongst poor to become self-reliant
information, awareness, education re. 74th Amendment



(Ajeevan, Kutch Mahila Vikas Sangathan, ACT, Setu)

Dignified livelihoods for urban poor



Kagaj Kach Patra Kashtakari Panchayat

&

Swachh
(Pune)



Other alternatives

Education: traditional and modern, oral and written, local and global

- Pachashala, AP
- Jeevanshala, Narmada
- Adivasi Academy, Guj
- Beeja Vidyapeeth, Uttarakhand
- Rheemi College, Karnataka



Other alternatives...

Technologies to reduce ecological impact, reach the poor (*malkha cotton weaving, AP; Hunnarshala housing, Kachchh; innovations in materials*)

Energy: decentralised, renewable
(*Ladakh solar; Bihar integrated*)



Spaces within the system...the government responds...

- **New laws:**
 - Right to Information Act
 - National Employment Guarantee Act
 - Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act 2006
- **New programmes:**
 - Organic farming policies / programmes in 16 states
 - Kerala decentralised planning / Nagaland communitisation / Jharkhand's Jharcraft



Radical ecological democracy (RED)

- achieving environmentally sustainable human welfare, through governance mechanisms that:
 - empower all citizens to participate in decision-making
 - ensure equitable distribution of wealth
 - respect the limits of the earth and the rights of nature

Radical Ecological Democracy:

A NEW POLITICS

Decentralised decision-making: 'localisation' and embedded landscape institutions

Ecoregional planning across states/provinces and countries ... political boundaries aligned with ecological and cultural ones?

State accountability through citizens' charters, public hearings, social audits, right to participation, policies ...

Radical Ecological Democracy:

A NEW ECONOMICS

Mindful of **ecological limits (sustainability)**: freshwater, climate, biochemical cycles

Equity as core principle and outcome



Indicators of human well-being: food/water/energy security, dignified livelihoods, happiness/satisfaction, social relations, health and learning ... post-2015 'sustainability/equity goals' to replace MDGs

Facilitation of **local currencies** and **non-monetised exchanges**

Fundamental values & principles of RED

- Biophysical sustainability
- Equity (inter/intra-generational, inter-species)
- Decision-making access to all
- Diversity and pluralism (of ideas, knowledge, ecologies, economies, politics, cultures...)
- Self-reliance for basics
- Cooperation, collectivity, and 'commons'
- Rights with responsibilities/duties (sense of ownership)
- Dignity of labour
- Respect to subsistence
- Qualitative pursuit of happiness
- Simplicity
- Respect for all life forms



Post-2015 Goals for India?

- 1: Integrity of *natural ecosystems* and *biodiversity*
- 2: Access to safe, adequate resources to fulfill *basic needs* (food, water, energy, shelter)
- 3: Access to dignified, sustainable *livelihoods*
- 4: Sustainable and equitable *production* and *consumption*
- 5: Sustainable and equitable *infrastructure*
- 6: *Service* and *welfare* sectors geared to sustainability and equity (incl health & education)
- 7: Macro-frameworks of *economy* and *polity* geared to ecological sustainability, human security, and socio-economic equity

Chris Madden



But beware of false or superficial solutions.... REDD/REDD+, CDM, geoengineering, carbon trade, etc



A word of caution...

Not a call for blind revival of traditions (often socially oppressive, fatalist)

Not fundamentalist environmentalism (saffronised green: tiger vs. tribal...)

Some issues to resolve....

Will big industry be needed?
Under whose control?

Will profits remain an
incentive, will private sector
have a role? How will public
control be maintained over
public sector?

Consumerism: how to bell the cat?



Personal actions: choices in use of materials, energy, transportation, etc

Social actions: policies providing incentives for



An end to globalisation?

- Global flow of ideas, cultures, materials will continue, but on principles of Radical Ecological Democracy

- Primacy to local self-reliance in basics

- Ecological sustainability

- Social, economic equity

Love That Dirty Water



**NO IMPOSITION OF ONE MODEL ACROSS
WORLD!**

Scenarios for 2060...

Business as usual: widespread ecological collapse, worse social inequities, water/resource wars, xenophobia, fortress mentality

Managerial responses (tech/market fixes, better laws/policies): collapse is slowed down, not averted; inequities persist

Radical ecological democracy: full-scale collapse averted, seeds sown for dramatic paradigm shifts, bioregionalism and localisation gain over nationalism



India is uniquely positioned to evolve alternative models like RED



For more information....

• www.kalpavriksh.org

• ashishkothari@vsnl.com

