LARGE ENERGY PROJECTS: THREAT TO ECOSYSTEMS, BIODIVERSITY LIVELIHOODS AND DEMOCRACY

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Large Energy Projects – Threat to Ecosystems Biodiversity, Livelihoods and Democracy

COAL WAS KING FOR TWO HUNDRED YEARS
THAT HAS PUT THE EARTH TO TEARS
NOW IS THE TIME FOR SUN & WIND
AIR, WATER AND CLIMATE WILL SAY CHEERS;
-- Fossil fuels are not only bad for the climate, they cause enormous air & water pollution. Abandon fossil fuels, go for renewable

FOSSILS ARE BEST KEPT BURIED
NOT TAKEN OUT AND BURNED
THE EARTH HAS GIVEN MANY WARNINGS
MORE - AND LIFE GETS OVERTURNED
-- abandon fossil fuels, go for renewables

Large Energy Projects – Threat to Ecosystems Biodiversity, Livelihoods and Democracy

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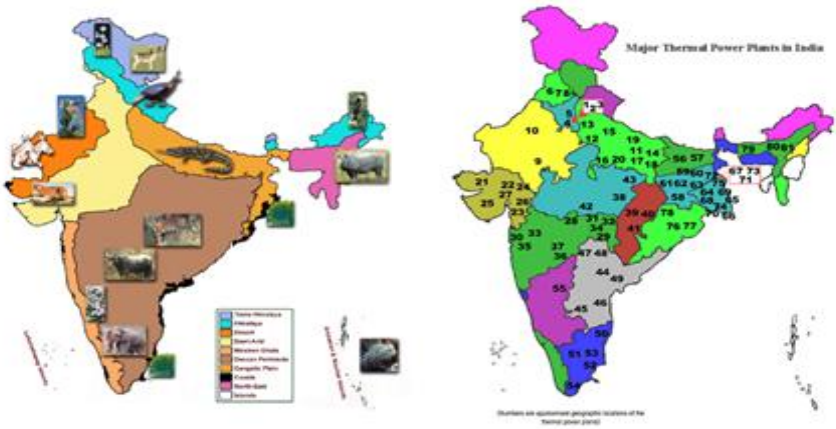
Soumya Dutta, Bharat Jan Vigyan Jatha / Beyond Copenhagen collective -- WSF/ Tunis

India – and many developing countries like it, is pursuing massive projects to produce electricity in vast numbers, and the overwhelming majority of these are giant coal-fired thermal power plants, huge nuclear power 'parks', and large hydro-electricity projects . The logic given is that of reaching power to those who do not have. The global figure of those without electricity access is about 1.3 billion, whereas in India, that number is over 400 million, and these are some of the poorest people on earth. If we look at the basic cooking fuel needs of the poor, the global figure is about 2.7 billion, while an estimated 750-800 million poor Indians still depend on polluting solid fuels and dirty burning stoves on a daily basis, leading not only to grave health problems, but also to considerable time and money outgo to procure these fuels. It is another matter though, that over the last two decades of accelerated push for liberalization-privatization-globalization that India has seen by its neo-liberal ruling class, the logic of more available power and fuels to provide electricity and cooking fuel to the poor – has not worked out. From an installed electricity capacity of around 64,000 MW in 1991-92, when about 54% of household had no electricity, to 2011 when the installed electricity capacity rose over three times, but the percentage of households without electricity fell to about 33%, with another 30% of household with connection getting a bare minimum of about 70-80 KW Hrs (the UNIT by which we pay our electricity bill) per person per year, making

hardly any significant difference to their lives. In the same time span, because of the massive increase of these large and high-impact energy projects, the environmental degradation, displacement and loss of livelihoods of natural resource dependent communities around these large projects and the health impacts – have all multiplied manifold. Most of this increased availability of electricity has gone to the affluent sections of Indian society, as they have exercised their 'right to buy'. Thus it is amply clear that within the present market based power supply scenario, the poor are not getting any significant power supply, while paying a large part of the externalized cost of these large energy projects, just because these are being sited near their 'low-cost' homelands. This is a travesty of democracy, being enacted by a supposedly democratic (even secular socialist – as per the Indian Constitution) State, in collusion with large wealthy corporations and clearly against the interests of its multiple millions of underprivileged!

Particularly for poor developing countries like India (and even poorer ones like Bangladesh) - where many more people depend on biological resource based livelihoods than formal jobs (only about 7% of the 'workforce' is in formal sector in India), recognizing and protecting the criticality of biodiversity and livelihood connections is extremely important. This is even more true, as in the 'organized' economic sphere, we have seen high economic growth without any commensurate growth in the number of jobs, on the contrary – over five million jobs have been lost in the last seven years or so. At this point of time, our country is being pushed hard by its political and business leaders -- into numerous large scale 'developmental' projects (often in the much less accountable private sector) all over the ecologically sensitive regions that harbor the greatest variety of biological and genetic resources. **Be it coasts, or forests, or wetlands**

INDIA ECOLOGICALLY SENSITIVE ZONES – COAL POWER (& NPPs) PLANTS OVERLAP MANY



or even the sub-Himalayan Mountains – there are serious threats now to all these essential biological/genetic resources and the multiple millions of livelihoods dependent on the access and use of these.

In this short piece, let's look briefly at just one driver of this destructive development, namely – the impact of coal as an energy choice, on the forests, coastal biodiversity and livelihoods. Two of the five critical areas pointed out in the Indian government's invitation letter to member countries of the UN Convention on Biological Diversity (UN-CBD), whose 11th Conference of Parties was held in the Indian city of Hyderabad last October - the issues of Biodiversity and Livelihoods, and Coastal and Marine Biodiversity - relate directly and are impacted badly by the large numbers of coal fired (and nuclear) power plants, coal mining and transportation activities along the Indian coast and

forests (the photograph below is of an opencast coal mine in Chandrapur, Maharashtra, India, with the remaining forest visible in the background, which is also the habitat of tigers, Indian Bisons and many other wild animals. This is an example of the kind of damage to a forest ecosystem done by a coal mine – which has hugely impacted forest dependent communities, apart from increasing climate change related emissions), along with damage from its associated washery, power transmission and other facilities.

This was once a dense forest – one of the best tiger habitats in India.

That makes a case for looking closely at these impacts from the perspective of the impacted – both the communities and the ecosystems, through case studies. We will also briefly examine how the government's policies on biodiversity and energy relate to each other. For the sake of brevity, here we will only consider the actual impacts of coal power plants on ecosystems, biodiversity and

livelihoods, as this projected coal sector expansion is frighteningly large --

NEARLY 200,000 HECTARES OF FOREST LAND CLEARED FOR MINING;

181 COAL MINES GRANTED ENVIRONMENT CLEARENCE – NEARLY DOUBLES CAPACITY;

113 COAL MINES GRANTED PERMISSION TO DIVERT 26,000 HECTARE FOREST LAND FOR INDUSTRIAL USE;

ENVIRONMENT CLEARENCE GIVEN TO 210,000 MW OF THERMAL POWER PLANTS – MORE THAN THE TOTAL EXISTING CAPACITY (206,000 MW IN JULY 2012) OF ALL POWER PLANTS,

All coal fired thermal power plants have several things in common that impact the surrounding areas, their ecosystems, biological beings and people dependent on these for their livelihoods-

- Often located in ecologically sensitive areas,
- Large areas of habitat loss (aggravated by associated 'developments'),
- Huge amounts of coal-dust generation, with their consequences,
- Disposal of both fly-ash and bottom ash, and their consequences,
- Dangers of mercury and heavy metal toxicity from above,
- also exposure to radioactive material from fly-ash, which is little documented in India,
- Disposal of slurry in water bodies /land,
- Chemical pollution of cooling water (additions to prevent bio-fouling, from boiler blow-down and other such),
- Contributes to acidic rains damaging life all around, from emission of acidic oxides,
- People's access to their traditional livelihood grounds are often blocked,

- Large amounts of water loss (often in water scarce areas) – impacting all life around,
- Large health impacts of both coal dust and fly ash on health of people and animals,
- Large and high-flow water withdrawal for cooling, with impacts on aquatic life,
- Huge amounts of warm water discharge back into water bodies, destroying aquatic life,
- Compounding of the above effect – because of de-oxygenation of discharged water,
- Huge amounts of CO_2 emission, accelerating global warming and climate change,
- Displacements of often the most vulnerable communities,
- Large scale capture and degradation of the same resources that the poor depend on,
- Impacts on local agri-horti-pisci cultures,
- Very significant human health impacts – even higher mortality rates, compounding other impacts,

In today's India, **two most critically important areas for preserving biodiversity – the Forests and the coasts, are also the two most invaded spaces by such large projects and infrastructural developments.** This is not to undermine the importance – in terms of biodiversity and people's livelihood dependence - of **rivers and inland water bodies**, which have also come under large-scale attacks from hydro-power plants, huge warm water discharges from thermal power plants, extremely polluted slurry discharges from mines and other pollutants from factories, urban over use and waste discharge etc. As a result of these, both the quantity and variety of fish available in these inland waters have gone down significantly – along with many other

aquatic life forms, endangering the livelihoods of over 10 million inland fisher-people in India.

A very large no of coal power plants, nuclear power plants, big and medium ports, luxury tourism projects, fast-paced urbanization etc are located on or very near the Indian coasts, which stretch for over 6,000 KMs in the mainland (and another 1500 KMs in the Islands) and are home to over 3200 fishing villages. The examples are numerous, and spread over from the eastern coast in West Bengal through the southern to the western coast in Gujarat -

- Be it the Kudankulam and Jaitapur nuclear power plants in Tamil Nadu and Maharashtra,
- Or the Port-SEZ-Ultra Mega Power Plants complex in Mundra, Kutch, Gujarat,
- Or the large numbers of luxury tourism projects in Kerala and Goa,
- Or the large number of big coal powered power plants in Konkan, Andhra Pradesh, and Odisha coasts,
- Or several large defense projects, including the navy bases (ie, Karwar),,
- Or the large no of fast-expanding coastal cities discharging huge amounts of untreated sewage into the nearest sea-coast,
- Or the massive chemical hub proposed in Nayachar in West Bengal,

Large parts of good, bio-diverse forest areas in India are also under attack from huge coal mining leases, form iron ore, limestone and bauxite mining and their associated activities. A few examples are –

- The dense forests of 'Mahan' in Madhya Pradesh being opened for coal mining,
- The unbelievably rich 'Niyamgiri' forests targeted for its rich bauxite,
- Pristine forests in Meghalaya in the north-east falling under limestone mining,
- Forest and sensitive areas in the lower Himalayas in Himachal Pradesh for limestone,

In fact, in the last Five Year Plan period (the 11th 5-year Plan till March 2012) alone, more forest areas have been opened up/ granted for coal mining than was done in the previous 40 years. Most of these are dense, biodiversity rich tropical forests, also inhabited by adivasis (indigenous people) and traditional forest dwellers. Along with these, much more coal power plants were okayed in the same short period – in the coastal areas, than ever existed. The loss/ damage to the ecosystems, the resident life forms and the dependent human beings can not only be imagined, but are visible in many spheres, and been documented in a few cases.

Let's take the illustrative case of the Mundra area in Kutch district of Gujarat, and show how these massive destructive impacts from large coal power projects are affecting ecosystems, biodiversity and people's health and livelihoods. **

Situated on the extreme west of India with an international border with Pakistan, Kutch is the largest district in India with an area of 45,652 Sq Km, large parts or nearly 30,000 Sq Km of which are salt deserts (Rann of Kutch), leaving a much smaller area for traditional

livelihoods like fishing, animal husbandry etc near the Gulf of Kutch coast.

1. Ecologically sensitive area: - Since this area is also home to the second largest mangrove forests (after Sundarbans) in mainland India, the diversity and richness of coastal life here is very high. ***"…… Kutch Coast is one of the rare ecological zones in the world having rich bio-diversity. It comprises of mangroves, Coral reefs, Mudflats, Seaweeds, Commercial Fishes and several rare marine species. The mangroves of Kutch are the second largest after the Sunderbans in the mainland of India. A prominent feature of the Kutch Coast is the vast intertidal zone comprising a network of creeks, estuaries and mudflats. The Kutch coast provides conducive environment for several sea based traditional occupations like fishing, salt making apart from land based occupations like agriculture, horticulture and animal husbandry"*** *(from* ***–"*** Kutch Coast – People, Environment and Livelihoods" – study by Fishmark and Kutch Nav Nirman Abhiyan). No one needs telling how incredibly important mangroves, coral reefs and creeks are for nurturing biodiversity. The extremely bio-diverse Gulf of Kutch area (satellite map below).

In such a fragile and biodiversity rich area, the Government has permitted – even invited - a big multi-berth port including coal terminal, a big SEZ and a number of huge coal power plants.

2. Destruction of rich mangrove forests - The associated coal terminal, the big port and the rows of massive coal power plants have destroyed a large area of mangrove forests. The rail-line from the port to the coal power plants has blocked large areas of intertidal zones, drying it out and killing the unique life forms. Mangrove forests being destroyed by power plant construction (picture below).

3. Coal dust making life difficult for nearby habitations of Tunda-Wand, from the huge amounts of coal being transported and handled (picture below). People complaining of coal dust in their food, water and all over their bodies when the stay / sleep outside in the night. What impact it is having on other life forms, is not well studied.

4. Disposal of huge amounts of fly-ash and bottom ash – This fragile area is witnessing two ultra sized and another mega sized coal power plants. The total coal handled will be over 30 million tons per year, generating anywhere between six to 10 million tons of toxic ash, most of which is being and will be deposited in open ash ponds, contaminating local water sources. A large US study by Clean Air task Force [*19] found that in 2004, additional deaths due to fine particles from fossil fuel power plants in the US was nearly 24,000, which in the latest study came down to about 13,000 per year, mainly due to strict air-quality regulations and monitoring. A National Academy of Sciences (USA) study*[20] found this coal-plant air-pollution related excess mortality to be as high as 20,000 in 2009. In this windy area, lot of it are also flying around to people's homes, grazing grounds, contaminating drying fish and crystallizing salt……. Drying fish getting contaminated by fly-ash (picture below).

5. Mercury and heavy metal are documented to occur in coal ash, and get transmitted to living beings – particularly bio-accumulators like larger fish. Fly-ash is known to be a major source of mercury pollution, and yet, there are no serious studies being attempted by the government about this large public health risk.
6. Radioactivity from coal ash – This is a serious threat which has not attracted enough attention in India, though in several European countries and also in the USA, there are studies to show that this is a threat (United States Environmental Protection Agency) has clear markers). In the Mundra area, we found the radioactivity to be more than double at 21-21 micro-sievert/Hr about 300-400 meters from the newly started ash pond of Tata-Mundra coal power plant, in comparison to .08-.09 around the villages a few Kilo-meters away. This with just one of the five units of the Tata-Mundra plant operational, and only for a few months, making one shudder to think of the situation when all five comes on stream and the dry ash beds spews ash in the strong coastal wind.
7. Contamination by coal slurry – Big coal power plants discharge large amounts of coal slurry, after washing the coal / also the water used to suppress dust gets contaminated. This large amount of highly contaminated water goes straight to the coastal waters of the Gulf of Kutch. What damage it does to the sensitive marine life – is not yet fully documented. Coal slurry going straight to bio-diverse Gulf waters (picture below).

8. Though the power plant operators claim that the cooling water contains no chemical contaminants, both visual and scientific evidence shows otherwise. On testing both the intake and outfall waters, the contamination becomes clear.
9. An independent water testing exercise initiated by the FF team, with the intake and outfall channel water collected on the 2nd of June, gave the following revealing results –

Persistent frothing in outfall channel water indicates chemical pollution (picture above).

TATA-Mundra – Inlet and Outfall Channel Water Test --

Parameter	Inlet	Outlet
Date of Sampling	**02-06-2012**	
Salinity- ppt	**41**	**43**
pH	**7.7**	**6.8**
TDS- ppm	**41230 ppm**	**43910 ppm**
DO-mg/l	**3.1**	**2.6**
Turbidity-NTU	**39 NTU**	**46 NTU**
Colour	**No visible colour**	**Slightly reddish/brownish**
Odour	**No smell**	**Strong odour**
COD-mg/l	**126**	**287**
BOD-mg/l	**2.4 mg/l**	**7.8 mg/l**

Thus, it can be clearly seen that some acidic material is being added to the cooling water, lowering its normal pH value. Both the colour and odour are also strong indicators of this. This is having strong adverse impacts on marine life – fish being very sensitive to such pollution, as can be easily visualized and established.

10. The dissolved oxygen level also dropped significantly, endangering all marine life. Both chemical and biological oxygen demands (COD / BOD) figures have increased sharply, indicating significant levels of pollutants. This also indicates increased stress on marine life – fish and their food system being of primary concern here -- dependent on the available oxygen in the water.

11. Possibilities of acidic rains – The Tata-Mundra power plant, though using comparatively high sulphur Indonesian coal, has not installed Flue Gas Desulphurizer (FGD), resulting in emission of acidic SO2,

and acid rain. This has adverse impacts on both terrestrial and marine life. Several studies have shown that installing FGDs reduce the mortality rates from Sulphur Oxide (SOX) emissions, and yet our coal power plants operate without them. Living in the shadow of Black Death (women and children living close to high pollution coal power plants that came up in their traditional lands, despite their opposition – picture below).

12. Access to traditional spaces for livelihood support blocked /made difficult to access – The Mundra area has large no of fisher-folk, pastoralists and salt makers, all of whom depended on free access to the coast line, to the grazing grounds and mud-flats. The big coal power plants in Mundra have all blocked access roads, put multiple check-points on these, erected boundary walls across access creeks – denying access to essential livelihood support for thousands (Access to fishing and grazing grounds restricted by "security gates" – picture below). The blocked access leads to two 'bunders' and large grazing grounds.

13. In the only area in entire Kutch coast, where good fresh water is available for drinking and irrigation, huge coal power plants are consuming large amounts of it by pumping it out of the ground. This leaves the communities thirsty and the land parched. According a report by Centre for Science and Environment, over 85% of the industrial water consumption in India is by coal and other thermal power plants.

14. Adverse impacts on health of people and domesticated animals (that on wild ones not yet known, but can be gauged) – People around the newly started coal plants in Mundra are already reporting a no of health problems. They also reported large increase in intestinal disease of cattle, which was corroborated by local veterinarians, with possible cause being pointed as contamination of grazing material by fly-ash and coal-dust.

15. Large withdrawal of cooling water is damaging marine life in Mundra. Just the Tata-Mundra plant will take in over 15 million liters per day, possibly causing death of large nos. of fish seedling with the pumped intake water, unless high technology special filters are used. On being specifically asked, the Tata-Mundra management could not give any specific information, meaning – in all likelihood - they are not using any such screening device, though this has become standard practice in most countries – with US EPA documents indicating that any intake rate over 2 million gallons/day should follow those safeguards. The impacts on fishing livelihoods are obvious.

One of the largest adverse impacts on aquatic life is from discharge of cooling water at a higher temperature than the ambient, where fish and other life are adapted. Combined with destruction of fish sanctuaries, this devastates small fishers. Some of the elderly fishermen gave us these approximate figures (in the box below) to show how the catch has declined in the last few years due to the Adani and Tata coal-based thermal power plants. As we can see, instead of getting better off from this "developmental" project, the fisher-folk in this area are getting poorer and facing harsher conditions due to the setting up of these power plants.

– Till 2004-5, 12 boats (4-6 persons in each boat) in this "bunder" used to get INR 25-27 Lakhs worth of fish each year,
In the year 2010 – 16 boats were used here, netting only INR 21 lakhs of fish for the year,
And in 2011 – 21 boats were used here, but the catch was less than INR 10 lakhs.

Going a little further to understand how these power plants have affected different species, it was found that two of the most prized catches, prawns and pomfrets – have declined drastically. The following figures were obtained from two 'bunders', Saleiha and Tragdi, and from the data for a large variety of fishes, only the more important fish-catch figures are being quoted here –

Year	Bunder (Fish Landing Centers)	Fish-Trader	Prawn Boil Dry	Prawn Dry	Pomfret <50	Pomfret >50	Lobster >100	Lobster Small
2009-10	Saleiha	Abdul Hasan Bhusar	NA	-	-	110	1714	-
2010-11			NA	-	-	00	137.4	139
2011-12			NA	-	-	-	125.5	37
2009-10	Tragdi	Juma Ismail Reliya	63	1246	49	24	3.3	4.0
2010-11			86.5	148	79	48.5	0.4	00
2011-12			06	21	18.5	02.5	00	00

As can be seen, the local fisher-people's complaints about drastically reduced fish catch for the economically important species, is backed by actual data, and the economic hardship resulting from this can be easily imagined. So much for conserving biodiversity and livelihoods – a 'priority area' of the CBD!

16. The two big power plants in Mundra (along with a few smaller ones will burn about 30 million tons of coal annually, thus releasing anything between 60-70 million tons of CO2, or nearly 1.5% of India's total CO2 emission, while contributing to a tiny fraction of a percentage of its total economic activity. The resultant addition to global warming, and its further impacts on biodiversity and

vulnerability of the poor will be significant. While the climate change hit people are asking even large developing countries like India to control their explosive emissions growth, these coal plants are taking us exactly the opposite way.

17. The array of big coal power plants in Mundra has already taken away temporary settlement land of thousands of fishers and large amounts of grazing land from the pastoralists, pushing them closer to poverty. Denied access to their grazing lands, more of the pastoralists have been forced to go there, but it still is a small part of the total animals, the rest forced into smaller and smaller areas. And the Tata's conveniently deny the existence of other animals, like camels. Figures of the amount of grazing lands handed over to these plants and industries in this region, brings out the extreme pressure that this additional denial of common grazing land has created (data provided by MASS).

Impact on Livelihoods – Animal Husbandry

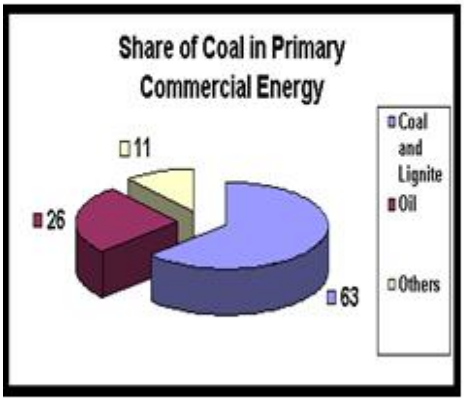
Village	Cattle	Reqd Gauchar Land(Ha)	Total Gauchar Land (Ha)	Gauchar Land allotted to SEZ(Ha)	Gauchar land Remaining (Ha)	Shortage in Required Gauchar Land %
Navinal	1753	280	137	94	43	85%
Tunda	1189	190.24	158	86	72	62%
Luni	833	133.28	81	81	0	100%
Siracha	3170	507.2	390	41	349	31%
Baroi	276	44.16	141	31	110	
Goersama	957	153.12	86	29	57	63%
Zarapara	5509	881.44	1000	408	592	33%
Mundra	273	43.68	NA	496	NA	

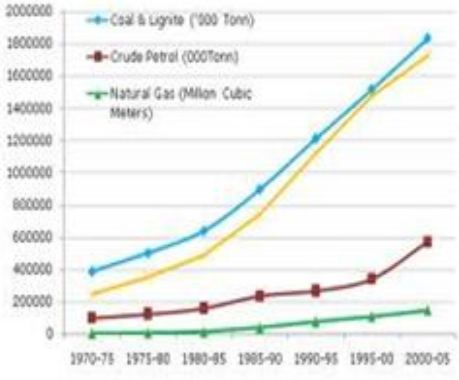
It is to be noted here, that after this table was produced some time ago, even Mundra has lost its remaining grazing land, aggravating the situation.

18. Local agriculture in Mundra was concentrated in this area as sweet ground water is available. The new coal power plants are pumping this out, and villagers can't compete with them, losing out on the only other livelihood option. On top of that, the villagers consistently reported that the industries and power plants used their influence to capture the small amounts of Narmada water that come in through pipelines, forcing them to a dry future. Without water, biodiversity of this unique land will slowly wither away.

There are other impacts, which are not elaborated here due to lack of space, and many are not documented or studied well enough to be convincingly /firmly presented. With the Indian government taking a policy of pushing for a large number of massive-scale coal power plants – in coastal and other eco-sensitive zones, and consequently large scale coal mining – most often in good forest areas, the duplicity of the Government policies – claiming to prioritize Biodiversity and Livelihoods, Coastal and marine Biodiversity etc – is starkly exposed as a lie.

COAL STILL ACCOUNTS FOR A VERY HIGH PERCENTAGE OF INDIA'S PRIMARY ENERGY AND IS GROWING VERY FAST





"Development' needs of a poor country cannot be addressed by destroying lives and livelihoods of the most vulnerable, to power large industrial machines and over-consuming urban centers. We need to look inward seriously and change course at the earliest, if the remaining ecosystems, biological diversity and livelihoods are to be protected and also enhanced. There is also the larger question of democracy – if the repeated and urgent cries of the underprivileged are continuously ignored, and the natural resources of the of the nation be handed over to a handful of wealthy corporations, sometimes by suppressing the impacted people by brutal state

repression. The Constitutional idea of the State acting as a trustee of all natural resources in the country – for the greatest public good - is also being violated through this blatant corporatization of both natural and common resources.

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** NOTE – The Mundra case study cited here has been undertaken by a fact finding team coordinated by the author, in April-May 2012, and the supporting material / evidence has been extensively used from that report.

NOTES

NOTES

Vasudhaiva Kutumbakam: From Democracy to *Sampoorn Swaraj*

Vasudhaiva Kutumbakam has been more a framework for connecting various levels and dimensions of political work in the manner that new forms of North-South solidarity and partnership could be worked out. It is not an organization competing with other organizations in terms of visibility and constituency. It owns and considers itself part of the radical democratic movement. The more we dialogue and rub shoulders with each other, the nearer we arrive at a more comprehensive and shared understanding of our times and the possible modes of intervention. The organizational form that Vasudhaiva Kutumbakam takes depends upon the local context in which people come together. Several organizations in India have adopted a programme on dialogues for comprehensive democracy, calling it 'the Vasudhaiva Kutumbakam programme'. Vasudhaiva Kutumbakam in India is not a registered organization but a forum to develop the international dimension of radical democratic politics of the country to become part of the world-wide movement for deepening democracy

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South Asian Dialogues on Ecological Democracy (SADED) was born in 2002, out of work undertaken cooperatively by Vasudhaiva Kutumbakam, Centre for the Study of Developing Societies (CSDS), and Lokayan in India; Kepa and Siemenpuu Foundation in Finland. However, the practical work of SADED is the outcome of an even wider collaborative and creative involvement by many individuals and organizations forming a network or web of efforts, which does not have one epicenter.

SADED encompasses democratic control of natural resources and looks upon it as integral to the expansion and deepening of democracy and to the survival of humankind. In this respect the Johannesburg World Summit on Sustainable Development (2002), disappointed all those who had any sensibility towards issues of ecological sustainability and equitable development of the humankind as a whole. Modern science, social and economic processes and policies tend to fragment life, issues and people's ways of looking at them.

BEYOND COPENHEGEN

BEYOND COPENHAGEN :

Beyond Copenhagen collective (BCPH) is a coalition of more than 40 organizations and networks working on the issues of sustainable development, environment, sustainable agriculture etc. We have been extensively engaged with India's response to Climate Crisis, Domestic Action and its position in International negotiation process under the United Nations Framework Convention on Climate Change. We have tried to attract global attention on due consideration of agriculture and food security in climate change negotiations, state responsibility and accountability for climate justice.

Organizations and networks part of the BPCH collective bring with them varying experiences and expertise, ranging from grassroots works with farmers and peasant communities to engaging with policy makers and the policy through policy analysis, advocacy and lobbying, with the media engaging through their sensitization and orientation; and undertaking documentation and scientific exploration in climate change, sustainable agriculture and food security. The focus of our work emanates from the understanding that there is an urgency to work in collaborative action on climate change and climate justice issues. The collective purposes to address these issues through a variety of actions at local, state / provincial, national and global level.