

## THEME PAPER

### **Climate Crisis, Carbon Trading and Energy Options**

*A critical look at 'big development' and 'big alternatives'*

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It is time that citizens and civil society initiatives in India put global warming, climate crisis, carbon trade and such issues high up on their agenda. These issues have so far been labelled 'green' and 'environmental'. They have been projected merely as a small sub-set of concern seemingly having little to do with peoples' resistance at the grass roots.

#### **Climate Crisis**

Though many natural factors can cause climate change, it is getting clearer by the day that the climate change we are seeing now is related directly to the ongoing 'industrialisation' of the planet and related human activities, which go by the name of development. Most of those likely to be affected by 'natural' calamities like floods, droughts, heat and cold waves, water crises, coastal submergence, and cyclones-hurricanes-typhoons, however, have no idea that these extremes of climate are partly being triggered by human actions. That the earth is gradually moving towards destruction because of highly energy and resource-intensive development is something the development economists of this country and the world steer clear of.

When burnt, fossils fuels (like coal, oil) produce greenhouse gases. These include carbon dioxide and methane among many others. All these gases are being increasingly stored in the earth's atmosphere, in amounts much in excess of what it can naturally contain. Other active carbon dumps like the oceans, forests, and land cannot store all of this excess carbon, and too much carbon in the atmosphere create green house effect, causing earth's temperature to rise alarmingly, and playing havoc with the climate. Concentrations of carbon dioxide have already risen from a pre-industrial level of 280 ppm (parts per million) to around 379 ppm in 2005, while methane concentrations have risen from 715 parts per billion (ppb) to 1,774 in 2005.

Global warming is triggering a cascade of effects:

Earth's average surface temperature has risen by 0.74°C since 1905;

The temperature increase is causing sea level rise due to ocean expansion and glacial melt;

The Arctic sea ice has shrunk by 2.7% per decade since 1978;

Snow cover in spring has decreased by about 7% in the North since 1950;

The average freezing date for rivers and lakes in the North over the past 150 years has arrived later by some 5.8 days per century, while the average break-up date has arrived earlier by 6.5 days per century;

Rainfall will keep increasing at high latitudes and decreasing over most subtropical land regions as was evident during the 20<sup>th</sup> century; dry regions may become drier and wet regions wetter;

The upward trend in hot extremes and heat waves will continue;

The duration and intensity of drought has increased over wider areas since the 1970s, particularly in the tropics and subtropics.

### **Carbon Trade**

In the wake of the Kyoto Protocol, an international agreement for 'slowing down' climatic change, a 'free' and 'globalised' market-based approach to the climate crisis emerged. Many of us took Kyoto to be a serious inter-governmental effort. It is typical of our times that the 'market' continues to define and shape both the climate crisis and its so-called 'solutions'. Hence the treaty provided the rich nations and their polluting corporations with an excuse for starting an absurd trade in the world's carbon-absorbing capacity. Companies, many of them chronic polluters in developing countries, sensed a windfall, and jumped onto the bandwagon. The inconceivable carbon trade became a reality.

The carbon 'offset' market that the Kyoto Protocol legitimises is proving to be extremely profitable for polluters and greenhouse gas emitters in both hemispheres. Polluting industries in 'developing' countries continue polluting, yet they earn extra money through flimsy claims that they are reducing carbon emission by say, changing designs of some boilers, or planting trees. The core question of actual, physical reduction of carbon remains shrouded in a forest of jargons and figures. The project developers, consultants, validating agencies and brokers who earn fat fees and/or cuts of the carbon credit revenue are all parties to this play, and the ground realities of these supposedly carbon-reducing projects seldom become public. The world, being a globalised 'village', allows these claims', howsoever false, to be sold at the carbon markets worldwide (exchanges have been set up to facilitate the trade). The buyers of these 'carbon credits' in developed countries get certified licenses to emit more carbon into the atmosphere, so that they can carry on with business-as-usual. The carbon trade is thus turning out to be the greatest legitimised hoax to have hit the world. The global marketplace has designed an unbeatable win-win model and while the roots of the problem have been left untouched, the European carbon market alone has already touched the magic 20 billion dollar mark.

Like the USA and China, India has not made any commitments to reduce greenhouse gas emissions and it has still a predominantly fossil fuel- dependent energy programme. However, at the same time, India has emerged as one of the most

favoured carbon market 'destinations'. All big Indian corporations are on board – Reliance, Tata, Birla, Ambuja, ITC. With more than 600 prospective Clean Development Mechanism projects queuing up to sell carbon credits, India has opened a new door for the worst kind of polluters. An indulgent, corporate-friendly government, aided by a blissfully ignorant civil society, has made India a paradise for carbon trading—India's own contribution to the era of globalisation.

What happens if carbon –credit-hungry but 'unclean' companies/corporations in India decide to become 'clean'? And start creating 'forests' which could supposedly act as 'carbon sinks'? Or plant millions and millions of hectares of land with bio-diesel plantations using species like jatropha? Or set up huge wind turbines, or worse still, large nuclear reactors? How would the huge land requirement be met? How many families have to be displaced for these clean/green projects? The same process of land-grab marks the processes of both development and 'alternatives', as people in India discover each passing day. They already see their land taken away and destroyed for large hydel-projects, special economic zones, new monoculture tree plantations and unsustainable industrial growth. The great 'development' package also includes its market-savvy alternatives.

Development and its market 'alternatives' together thus create a nightmarish scenario where the temperature of the planet rises, glaciers continue to melt, extremes of weather play with people's lives and resources, and at the same time the 'industrial' society thrives by burning more coal and oil to produce energy, and emitting more carbon to the atmosphere.

### **Alternative Energy Options**

There is a major US-backed initiative to proclaim that nuclear power is safe, environmentally benign and an economically viable source of electrical energy for the future. In spite of the fact that during the last decade nuclear power plants were no longer being set up in most developed countries, the government in India plan 24 new nuclear power plants, in addition to 23 already functional or under-construction.

Do we want a future where 'alternatives' appear in the guise of giant nuclear projects, large hydros, and huge windmill farms all of which affect peoples land and livelihood, and destroy their environment? The recently concluded Indo-US agreement on Sharing of Nuclear Technology and the Bush Administration's emphasis on large renewables and nuclear power as carbon-neutral and 'clean' projects raise these questions yet more strongly.

There is an urgent need to review the other energy options. Big dams in India have become synonymous with displacement and environmental disasters. In spite of the fact that India's energy programme includes large hydro projects in bulk, nobody can any longer think of these projects as 'clean'. Large on-shore windmills need huge tracts of land and, as seen at the Western Ghats area of Maharashtra, could become a major threat to local people.

We must say an emphatic NO to nuclear power and large hydros, and to all forms of 'alternatives' that the market creates and sustains. And we need to talk about people's alternatives – small, sustainable, and practicable. It is becoming increasingly important that alternative energy options need to be chosen with a pro-people attitude, and that such options are better sought beyond corporate interests and the mindset of large projects.

### **End Note**

Big players in the world and the 'Desi' Market are out to grab natural resources, much like the nation states of yesteryear did on their colonial hunts. Concerns about deforestation, degradation, displacement or pauperisation are irrelevant in this new drive. This is a war, which doesn't get reported. It is little known, little understood – but all pervasive and a war nonetheless.

We will have to take sides in this war and challenge the 'whatever-they-do-is good-for-us' and 'market-knows-best' forms of a faceless human civilization that increasingly haunts us.

It is time to resist the paradigm of so-called industrial development and wasteful consumption; it is time to oppose the global polluters making profit at the cost of the earth's future; it is time to assert the right to choose non-fossil fuel, non-nuclear energy options.

It is important that people build strong resistance against all attempts at commodifying their lives and resources and putting up the planet's nature on sale. Whether be it Singur, Nandigram, Haripur or Kalinganagar – and for that matter dozens of such lesser-known locations in West Bengal and elsewhere, perhaps only strong resistance from the people can provide some direct answers to climate change.

This programme looks at the connection of the climate crisis with the all-pervasive model of development that both local and global governments promote, and questions the rationale of this development that turns our societies and nature into saleable commodities.

In this programme we will try to first understand the new politics of climate, and how the economics of both development and its market alternatives are intrinsic to that politics. We will also see how people around the world are resisting this politics. We will then try to strategize about our future course of action in relation to what is happening around us today, here in West Bengal and elsewhere.