

## **Asia's Brown Pollution Cloud: Caused by Renewable Fuels!**

by Dennis T. Avery

That vast cloud of brown pollution hanging over Asia comes from wood and cattle dung being burned in millions of Third World home-fires, according to Orjan Gustafsson, a bio-geochemist from Stockholm University. Gustafsson recently tested the smoke of the Asian brown cloud with a newly developed radiocarbon technique—and found that two-thirds of the brown cloud's particles are organic matter, mostly wood, straw and dung.

These are the “renewable fuels” that Greenpeace and the Sierra Club doesn't want publicized. They'd rather not focus on the harsh reality that these open cooking and heating fires are dreadful for the health of Asian women and children. The lung diseases caused by the indoor smoke are equal to a two-pack-a-day cigarette habit, says Barun Mitra of India's Liberty Institute.

The burden of indoor smoke has been worse in the past two globally-colder winters, as temperatures have turned sharply downward from the peak warming of 1998. More than 60,000 cattle froze to death in Vietnam in February. Homeless people have frozen to death in Kyrgistan, and travelers have been suffocated under snow avalanches in Afghanistan. Crumbling Soviet-era electricity and gas systems in Tajikistan have forced homeowners to burn dung again in a country that thought it had graduated to a better life.

Even in the best of times, burning the wood, straw, and dung are costly in human labor. Finding wood where trees are scarce—and/or don't belong to the villagers—can take hours per day. And the problem is worsening. Mitra says India's fuel-wood requirements will double in the coming years unless it can burn more propane and kerosene. The landscape is being stripped of trees now; where will the extra trees come from?

The manure should not be burned at all—ever. It should be returned to the fields, to maintain soil fertility on the millions of crop acres which produce Asia's rice and wheat. The farmers, however, can't afford to give up a key source of scarce heating fuel; they own the dung, and they seldom own trees.

The open fires, whether dung or wood, don't even provide much heat. A ton of wood produces only one-tenth as much heat as a ton of kerosene. Moreover, the lack of electricity condemns families to go without lights or refrigeration

Slash-and-burn farmers also contribute massively to the pollution cloud. Nitrogen fertilizer (taken from the air with natural gas) is scarce and expensive. So tropical forests are cleared, depleted of nutrients and the farmers move to the next forest area. Westerners are driving up fertilizer costs for poor farmers by using more natural gas instead of burning coal because of green restrictions.

The world could save massive tracts of forest and vastly enhance the soil nutrients in its crop fields by shifting from wood and dung to gas, electricity, or kerosene heaters. That would mean more CO<sub>2</sub> in the air—but there is no evidence that a bit more CO<sub>2</sub> in the air is a bad thing. Sunspots have had a 79 percent correlation with our temperatures over the past 150 years, while CO<sub>2</sub> has only a 22 percent correlation. Over the last decade, temperatures have actually declined as atmosphere CO<sub>2</sub> rose another 5 percent. CO<sub>2</sub> is not the forcing agent; the earth's warming (and cooling) is tied to a long, natural, solar driven cycle.

How long must the non-correlation of CO<sub>2</sub> and temperatures go on before we start a new crusade—to get gas, oil, and electricity for the world's poor so we can preserve the health of third world women and children while saving forests and topsoil?

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