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## Colonizing Africa's Atmospheric Commons

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## ***PART TWO: DURBAN COP-17 CONFLICT***

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### **Colonizing Africa's Atmospheric Commons**

*Khadija Sharife*

At a January 2010 conference, “Investor Summit on Climate Risk” held in New York, more than 450 investors controlling over US\$13 trillion in assets declared that action must be taken to preempt international climate change treaties in order to develop sustainable economies, chiefly through the carbon market. “Copenhagen was a missed opportunity to create one fully functional international carbon market,” conceded Peter Dunsombe (UNEPFI 2010), head of the Institutional Investors Group on Climate Change, comprised of European financiers. The United Nations Environment Program anticipates that 85 percent of the finance required to make the shift will be derived from private investors. The commodification of pollution is inspired by the rationale of market efficiency: major polluters issued with permits are incentivized to emit less, thereby enabling them to make a profit selling excess permits to those less efficient. In order to limit the pollution bubble, the Kyoto Protocol’s “flexibility mechanisms” facilitate a process allowing for polluters to finance carbon-light projects in countries that would otherwise engage in conventional methods. By doing so, securities are generated through various “offset” tentacles designed to exploit the “underdeveloped” status of countries that fail to access and utilize their share of the atmospheric commons.

As a result, it is worth asking whether the Kyoto Protocol should be extended, as is, for a second period beyond the current emissions target cut-off date in 2012. There is certainly a need for a legally binding deal that makes substantive emissions cuts, so for that reason there is a strong progressive lobby—led by the Third World Network—to extend Kyoto. But there is a downside especially evident in Durban: thanks to offsets that grant industrial polluters a get-out-of-jail-free card through Kyoto’s Clean Development Mechanism (CDM), polluters circumvent caps by bankrolling “green-wrapped” business-as-usual projects in “poor countries.” Offsets such as Durban’s methane-electricity conversion CDM at the Bisasar Road landfill or timber-related offsets emerging across the continent facilitate the process of corporate gaming, simultaneously utilizing Africa’s underdeveloped status as yet another exploitable resource, with the added danger of “enclosure” threats to residents.

### **Bisasar Road, Durban**

Twenty-five years ago, in my old home neighborhood of Clare Estate in the relatively close-in suburbs of Durban, a vast dump was designated in what had been a pristine valley. The Bisasar Road dump would become Africa's largest formal landfill, and was simply imposed upon a black community (specifically with "Indian" and "Coloured" race classifications, later to be joined by African informal residents known as shackdwellers). In 1994, there were widespread written promises of Bisasar Road's closure by Nelson Mandela's African National Congress. Delays occurred as other landfill closures in a poor black neighborhood (Umlazi) and a new edge city (Umhlanga) were prioritized. Then, because of the World Bank's interest in carbon trading, which peaked in 2002, and thanks to the Kyoto Protocol, a decision was made by municipal officials to leave Bisasar Road open for business.

The scar across my own pelvis, and that of my sister, are witness to the carcinogenic effects of the dump, an area where seven out of ten households on the western side have "reported tumor cases" (Reddy 2005). Community activist Sajida Khan died of cancer in 2007 fighting the dump. She diagnosed the larger political cancer: "Poor countries are so poor they will accept crumbs. The World Bank knows this and they are taking advantage of it" (Bond 2007).

As a source of electricity, the project is more symbolic than serious, generating an insignificant 6 MW of so-called "green power" electricity from methane mixed with toxic gasses; Durban's daily consumption is around 1,500 MW. But the damage of maintaining the dump so as to extract methane for many more years is that medical, industrial, and domestic waste continues to poison the land and water, with methane seeping into surrounding homes. An alternative advocated by Khan was to close the dump, install collection pipes, and integrate the landfill flow of gas (7,000 cubic meters per hour) to Petronet's pipelines running past the site. This idea was rejected by Durban's leading official involved with the project who stated:

"[What] if something goes wrong with this pipeline? If the land subsides or they do something funny with their pipeline? Don't send the problem to someone else's backyard and tell them to sort out our methane. We think it's very irresponsible. The world thinks it's very irresponsible". (Reddy 2005.)

According to Parkin, deputy head of engineering at DSW, "What makes [the dump] worthwhile is the revenue that can be earned from carbon credits." Bisasar's CDM classification neatly legitimizes the presence and active state of the lethal and carcinogenic dump for US\$15 million in certified emissions reduction credits (CER) for methane-to-electricity conversion over a 20-year lifespan. Trevor Manuel, previously South Africa's Minister of Finance and now head of a new planning ministry, recently stated that such projects would potentially provide up to half of the \$100 billion annually in the Green Climate Fund (GCF) as well as tax exemptions.

In March, Manuel became co-chair of the GCF design team, and in July he repelled calls from Nicaragua's UN delegation to disqualify the World Bank from the team on grounds of conflict of interest, since they are interim GCF trustees (Bond and Sharife 2011).

### Extending the African Resource Curse to Forests

African states are great fans of tax “competition”: a large share of the continent's exports (80 percent of which are primary commodities) are negotiated via secretive development agreements, swapping corporate tax holidays (the main source of income from rents) for bribes. It is precisely the lack of revenue disclosure, redistribution, and re-pricing—in the process, concealing socio-ecological costs of extractive industries, which are classified as externalities or hidden costs—that has catapulted Africa into the position of the continent most vulnerable to climate change, according to the UN's Intergovernmental Panel on Climate Change (IPCC) (UNEP 2006). Unlike developed nations, which derive 80 percent of their wealth from intangible capital (education, etc), African citizens depend on the health and evolution of direct ecosystem services such as fisheries, fertile land, and fresh water, which account for 70-80 percent of the continent's natural wealth (*African Business* 2009).

This political economy is the opposite of Africa's concept of Ubuntu: a person is a person through each other's “humanity.” But humanity cannot sustain itself without the resources that, under capitalism, must be legally recognized and commodified before “development” (via sustainable economics) can take place. The result: a resource-rich, mal-developed continent controlled through forced peace—i.e., electoral authoritarianism or militarization. Though Africa remains a major supplier of fossil fuels, over 30 percent of the total human population living in darkness resides in Africa, with the continent contributing just 5 percent to global electrification and 3.5 percent of carbon emissions (UNEP 2006).

Paradoxically, Africa supplies as yet legally unrecognized “ecological services,” such as the Central African rainforest, to the North. In Africa, one-third of the world's intact tropical forests cumulatively absorb 5 billion metric tons of carbon each year, conservatively valued at \$16 billion, a figure almost equivalent to the ecological reparations offered by developed nations for exhausting the atmospheric commons (*Science Daily* 2009). But global warming, packaged as an apolitical environmental issue, has yet to be placed in the context of “selective justice.” The ecological debt from rich nations to poor nations is still notional, even if various studies measure it in the tens of trillions of dollars—a fact even media vanguards of the North such as *CNN* have acknowledged, citing the \$2.3 trillion “eco-debt” ecological economists at the University of California, Berkeley claim is owed to Third World countries (Oliver 2008). Yet the architects of the cap-and-trade system deliberately blur the lines between victim and aggressor. The former suffer the threat

of “caps” on survival-carbon necessary for basic electrification, and the latter seek to enforce ownership of atmospheric rights so as to preserve the fossil-fuel-intensity of their economies.

One revealing example of the way carbon is being colonized is REDD: Reducing Emissions from Deforestation and Forest Degradation. The initiative is designed to protect and conserve the world's remaining lungs and carbon sinks—forests—where ongoing deforestation and degradation currently account for 17 percent of global emissions from stored carbon. Success will be achieved from stopping these destructive processes, which are taking place primarily in countries that are under-resourced, punctuated by corrupt or diminished states, and unable to police or protect forested land from illegal logging. The REDD initiative also intends to finance the protection and conservation of said lungs: a fifth of the world's fossil fuel emissions are absorbed by forests, with Africa acting as a sink for 1.2 billion metric tons of CO<sub>2</sub> annually (*Science Daily* 2009).

REDD was first proposed in 2005 at the 11th Conference of the Parties (COP-11) by the Coalition for Rainforest Nations, a 15-member group of forested “developing” countries including Nigeria, Equatorial Guinea, Liberia, Lesotho, Kenya, Indonesia, and Madagascar. The coalition's self-described goals are to generate revenue streams derived from a program of “forest stewardship reconciled with economic development” that is chiefly driven by communities. Multilateral drivers of REDD include the UN-REDD program and World Bank Forest Carbon Partnership Facility. The Bank is a key financier with a US\$300 million fund (Global Witness 2008).

The incentive for African states to receive funding via carbon credits by “farming forests” appears to be compelling from both a financial and ecological point-of-view. On the surface, the REDD deal offers a double-save: first, by ensuring that forests remain “intact,” and second by attaching the ability to generate revenue to conservation of forest lands. For instance, after the Amazon, the Central African Rainforest has the world's second largest forest cover, accounting for 18 percent. Kenya's 400,000-hectare Mau Forest Complex—East Africa's primary water catchment area—for instance, may average 160 tons of carbon per hectare (Vidal 2009). However, by “farming carbon,” the commodification and financialization of ecosystem services within the context of capitalist economy occurs—with all of the accompanying socio-economic injustices, ranging from land-grabbing to displacement of indigenous peoples.

Ethiopia's dictator, Meles Zenawi, is at the helm of a country facing severe ecological crises due to mass deforestation caused by illegal logging. The country's Agricultural Research Institute reports a loss of 200,000 hectares per annum (Ababa 2007). The head of Ethiopia's Institute of Forestry Development, Dr. Alemu Gezahegn, revealed that Ethiopia would lose all forested land by 2020 if deforestation continued at the current “alarming pace.”

France itself maintains an extensive logging footprint in former African colonies and other “Francafrique” territories, such as Cameroon and the Democratic Republic of Congo. Cameroon is one of the world’s top five wood exporting countries and is chiefly dominated by a small handful of French companies such as Coron, Rougier, and Thanry. In 2005, *Inter Press Service* quoted a senior official at the Cameroonian Centre for Environment and Development based in Yaoundé who said that NGOs could not name the logging companies for “fear of reprisal,” while “the police shy away from investigating the matter as well. . . because those who are profiting illegally from logging allegedly include senior police officials” (Tetchiada 2005). As one French national involved in the logging industry revealed to *IPS*, “We’re asked for bribes amounting to millions of CFA francs, and we often pay these out.”

Logging is big money. In 2003, for instance, Greenpeace (2003) claimed “using GPS coordinates, our investigations have provided evidence of an illegal road network, log ponds and abandoned logs over an area of about 14 km<sup>2</sup>. Preliminary estimates indicate that the illegally produced timber is worth about 1.5 million Euros.” Though wood from Africa and Asia is increasingly treated and finished in China, Europe remains the primary market. Illegal logging of forested lands, generally termed as common property resources (thereby indicating government ownership), or as customary or community ownership, which may lack ownership altogether, has rendered barren millions of hectares within the Mau Complex in Kenya and across the continent. Sudan, for instance, has experienced the loss of more than 8.8 million hectares (ha) of forest; the Democratic Republic of Congo, 6.9 million ha; Tanzania, 6.2 million ha; Nigeria, 6.1 million ha; and Cameroon, 3.3 million ha.

Ironically, REDD’s process is capital intensive, allegedly requiring an average of US\$2,000 for every hectare certified after ownership has been legally proved. This renders the process of establishing farming carbon projects similar to other enclave capital-intensive industries where states tend to lack the funds required to finance the “investment,” thus paving the way for foreign financiers. And regimes, whether corrupt or democratic, automatically remain on the receiving end of “profit,” so long as these forests remain open to investment designed to cash in on pollution as well as circumvent emission reductions embedded through gaps such as the “flexibility” mechanisms in the Kyoto Protocol.

As market-maker Ken Newcombe stated at 2004’s Carbon Expo in Cologne, “The World Bank is reducing the risk for private investors” (Lang 2004). And for private investors, the opportunity is tempting. At the Rukinga ranch in Kenya, for example, wealthy “Western” dotcom entrepreneur Mike Korchinsky and his partner Bob Dodwell spent more than US\$400,000 over a period of six months certifying and analyzing the 80,000 acres of land they purchased for US\$10 per acre, engineered as a deal that would benefit from the REDD scheme. They can expect well over US\$2 million in returns annually (Vidal 2009). Chunks of Kenya’s Mau Forest Complex have been acquired by bogus companies related to the state with

concessions large and small, such as the Moi-connected Sian Enterprises (*Daily Nation* 2009). Others include Olalarusi Inv Far (9,887 acres), the Catholic Church of St. Francis (7,305 acres), Ilgina Contractors (3,202 acres), and the Kiptagich Tea Estate (Ndungu Commission of Inquiry 2004). Ironically, many like Ilgina, whose directorship is comprised of the powerful Ntutu family (Agnes Naropil Ntutu, Kiteleiki Ntutu, and Kunini Ole Ntutu), were party to the registration and allocation of land via the Ntutu Presidential Commission. In 1986, the Commission demarcated the boundaries of the Maasai Mau Forest. According to Nairobi's *Nation* newspaper, "members of a powerful [Ntutu] family in Maasai amassed chunks of land, virtually owning the entire Maasai Mau Trust Land Forest in Narok" (Wafula 2009). Unlike Korchinsky and Dodwell's plan at Rukinga ranch, where 50 community "shareholders" will receive returns from the project, and US\$600,000 will be ploughed back into protection, the bulk of forest concessions are afforded little, if any, accountability. As Dodwell told *The Guardian*,

Logging companies may turn into carbon companies. In most countries in Africa you can do what you like, log out the trees, put in roads, do anything. There is little or no monitoring. The rewards could be 99 percent for me and 0.5 percent for the communities. (Vidal 2009).

But for the Mau Complex's Ogiek peoples, who were marginalized from ancestral lands during the days of the British Empire, the conservation practiced at Rukinga amounts to nothing more than criminality. One result is the forced displacement of more than 1,650 families since November 2009 (Lang 2009). Even though he supposedly offers the leading hope for democracy in Kenya, Prime Minister Raila Odinga in 2009 suggested that every single Ogiek would face arrest if they did not voluntarily move as part of the government's plan to "reclaim" the Mau Forest Complex (Lang 2009). This move had been promoted as part of the agenda to secure the Mau's crucial forested land, which also generates East Africa's primary water catchment area that supplies major rivers and lake systems, including the Nile and Lake Victoria, and feeds into Uganda, Tanzania, Somalia, Ethiopia, and Sudan.

Policies resulting in the displacement of vulnerable peoples like the Ogiek mark the general trend of REDD projects. Of 144 projects assessed by the International Institute for Environment and Development, just one project "included a proposal to make community-managed forests or indigenous peoples' rights a binding part of REDD" (Vidal 2009). And despite peoples such as the Ogiek possessing the complex knowledge base required to monitor and protect the Mau Complex, this cannot be done without according legal rights to indigenous peoples, who occupy such land through customary and community ownership. These are the people branded by the Kenyan government as squatters. According to the Washington-based Rights and Resources Institute, the process would cost just US\$3.50 per hectare (Ostrom 2009). But the "paper parks" backed by the UN have failed to acknowledge forests as "socio-ecological ecosystems," preferring instead to protect "natural" land devoid—



or cleansed—of peoples, leading to the rationales of the conservation and privatization tradition.

### Norway's REDD Investments in Tanzania

Norway-based Green Resources Ltd's plantations are a good case study. Africa's largest forestation company appears at first blush to be an entity with a sustainable mission, ranging from recuperation of wood waste to carbon sequestration. This is no accident: just two days after the UN Framework Convention on Climate Change's (UNFCCC) Kyoto Protocol was adopted, the company (then known as Fjordglott) increased its capitalization from US\$98,000 to US\$1.4 million, later extending invitations to private investors, such as Norwegian corporation TRG, to acquire shares (Eraker 2000).

Green Resources' activities include plantations, carbon offsets, forest products, and renewable energy. The company, primarily operating in East Africa with 3,500 employees, holds 12,000 ha in Uganda as well as significant areas in Tanzania (34,000 ha of land, with a further 120,000 ha in the process of acquisition), Mozambique (172,000 ha), and Sudan (179,000 ha). It also owns East Africa's largest sawmill, Sao Hill, and remains one of the continent's largest producers of transmission poles required for electricity, among other products such as wood for housing. The company's current major shareholders include: Phaunos Timber Fund (26 percent), New Africa (26 percent), Steinerud (10 percent), Macama (8 percent), Storebrand ASA (8 percent), Verbene Investment Ltd. (7 percent), TRG (4 percent), and Preben Invest AS (3 percent) (Green Resources 2011). Unlike the company's limited competitors, Green Resources has the comparative advantage of already having significant experience in land acquisition, the lack of which the company describes as a "significant entry barrier" (Sharife 2010b). Green Resources' competitors include the Global Forest Solidarity Fund, a private initiative active in Mozambique, funded to the tune of US\$100 million from investors such as Harvard University; in the last decade, this concern has planted 5,000 ha. Others include the U.K.-financed New Forest, which operates in Uganda and Mozambique and planted 1,500 ha in 2007; Actis/CDC, which controls 7,000 ha of teak plantation in Tanzania, as well as logging rights in Sudan; Raiply, East Africa's largest forest industry company, which owns 12,000 ha in Tanzania and has operations in Kenya; and Rift Valley Holdings, self-described as "one of the largest investors in agriculture and forestry in sub-Saharan Africa" (Rift Valley 2011).

As Mutuma Marangu, chairman of a Green Resources subsidiary, recently explained in an interview with Canada's *Business News Network*, a tree that takes 70 years to grow in Norway, takes just 17 years in Tanzania. Given the geostrategic location of East Africa and the rising need from emerging nations such as China for wood, Marangu believes that with major forests coming online, Chinese, Japanese, and other major users of wood in the near- and far-East will move toward East Africa

as opposed to Brazil, Argentina, and Chile, their traditional mainstays for lumber. "There is a shorter shipping voyage from China to East Africa rather than China to Brazil," he stated. "There is ample opportunity here. We have the least penetration of forestry and forest cover in the world, the greatest possibility for growing trees. We are leading by example." Marangu added population growth at "one million people, per year" in Kenya, Tanzania, and Uganda created an annual demand of wood for 300,000 homes in each of the three countries. "In terms of power and demand, there is an extreme need for both (wood) production and (carbon) offsets. At present, there is not much multinational or foreign investment in the sector," he said (*Business News Network* 2010). Currently, "high cost" producers such as the U.S.A. (producing over 600 million cubic meters of wood per year) and Russia (which produces over 400 million cubic meters yearly) among others like Uruguay, Brazil, Indonesia, and South Africa, account for 80 percent of supply. (Green Resources 2009) The company notes that Russia's new log wood export tariffs (€50 per cubic meter) exceeds Tanzania's stumpage costs (the residual costs after subtracting various allowable costs such as transport).

The optimistic assessments of China and India as consumers are reflected in the doubling of timber imports from 2002 to 2006. And while China has increased domestic plantation of both hardwood and softwood (rising from 6 million and 7 million cubic meters, respectively in 2000, to 25 million cubic meters and 16 million cubic meters annually in 2010), China's "explosion" in wood imports will have only a "modest impact" (Green Resources 2009). It is precisely the company's vast wood resources that enable it to perceive carbon offsets as a viable means of generating profits through carbon sequestration or storage via plantations. Plantations are seen as a profitable means of mitigating climate change under the umbrella of the CDM. Despite studies by Stanford University's Program on Energy and Sustainable Development, which reveal that between one-third and two-thirds of CDM projects "do not represent real carbon reductions" (quoted in Christian Aid 2009), CDM projects account for 20 percent of the official carbon market (Green Resources 2009), which in 2009 was valued at US\$17.5 billion out of US\$94 billion. The European Union carbon market comprises 77 percent (US\$72 billion), but the market itself is pegged to explode by 300 percent in the event the U.S. market ever comes online (Macken 2011).

The relevance of forests as a means of "sinking" carbon was recognized by the Kyoto Protocol's Articles 6 and 12, which are related to project activities and emissions trading. Article 6 articulates that Annex 1 (or developed/industrialized nations accounting for more than 80 percent of historical emissions), may transfer carbon credits to or acquire carbon credits from any other Annex 1 country. The result is the creation of various projects aimed at reducing man-made emissions or enhancing carbon sinks (Brown 1999). Included in Article 6 are two key provisions stipulating that any claimed emissions reductions must not be from emissions that would have otherwise occurred. Meanwhile, Article 12 concerns the role of non-Annex 1 nations (developing countries) by defining the role of CDM initiatives,

enabling—in theory—developing nations to move forward sustainably through technology transfer (for example, solar and wind power) from developed nations. Aforestation (A) and reforestation (R), or “A/R,” projects were adopted by the 9th Conference of the Parties (COP) in December 2003 (Republic of Tanzania 2007).

In 2009, Green Resources declared that existing projects will generate over 60 million metric tons (mt) of carbon capture during the next decade, with total forestation carbon capture expected to peak at 2 million mt per annum for existing projects then under development (Green Resources 2009). Additional projects are estimated to generate 9 million mt by 2020, when “net growth in biomass is the highest.” The Norwegian government, eager to offset some 6 million carbon credits (TimberWatch 2009) has already acquired carbon credits from Green Resources.

Tanzania ratified the Kyoto Protocol in 2002. The UNFCCC’s approval is vital, as is the approval of the host country via the Designated National Authority (DNA). Tanzania’s official CDM guide for investors confirmed this structure, revealing that, “In Tanzania, before the DNA can approve the A/R project activities, it is addressed by the Ministry of Natural Resources and Tourism through the Forest and Beekeeping Division which has formed a task force to look at A/R project activities and other factors related to carbon trade opportunities.”

In order to “speed up” and simplify the process for small-scale CDM initiatives, Tanzania’s CDM guide says the government has implemented “faster registration, only four weeks after submission, exemption from [a] registration fee,” as well as entities that are “validated, verified and certified by the same designated operational entities” (DOE). DOEs are responsible for checking that CDM projects conform to proper regulations. To achieve DNA approval, “project idea notes” (PIN), which identify the “additional” nature of the project that enables it to qualify for CDM status, and project design documents (PDD) are required, while DNA involvement from the project start date is preferred. Projects earmarked for rural areas are also preferred, while technology transfer remains one of four key conditions pending approval by the DNA. The guide further reveals: “Timing of the CER sales has an impact on the price which can be obtained. Contacting buyers at the PIN or PDD stage can be advisable if financing for the CDM registration is sought.”

Green Resources (2010) describes its Idete Forest Project as one such CDM initiative: “The objective of Idete is to grow trees for carbon storage and to harvest forestry products for sawn timber, utility poles and renewable energy.” Although the company submitted the PDD in November 2008, planting at Idete had already begun in 2006 on degraded grasslands (Green Resources 2010). Forest Stewardship Council (FSC) certification, already achieved in 2008 at the company’s Uchindile and Mapanda concessions (Sharife 2010b), is fundamental to ensuring that best industry standards are maintained. According to Dr. Blessing Karumbidza of the University of KwaZulu-Natal, it is Norway—one of the world’s leading oil-producing nations—rather than Tanzania that stands to benefit:

The Idete project was allegedly underwritten by Norway's Ministry of Finance. The Norwegian Prime Minister, who was present at the time of the launch, articulated the importance of carbon credits as a means of offsetting Norway's emissions. Tanzania was at the heart of the deal (Sharife 2010b).

According to Karumbidza, who also represents the African civil society organization TimberWatch, the irony is that wood plantations are not forests but monocultures and thus should not receive FSC certification.

Green Resources claimed that the acquired Idete land was degraded through fire, but unlike wood plantations where fire can destroy wood products, grassland fires serve a very natural and quick process of maintaining the ecosystem by removing dead herbaceous materials, recycling nutrients, and other important factors. The purpose of this and similar CDM deals is not to transfer technology enabling sustainable development and renewable energy in developing countries in exchange for offsetting Western emissions, but instead, more of the same exploitation. (Sharife 2010a.)

Species are primarily composed of potentially invasive eucalyptus (59 percent) and pine (40 percent). The forest, situated in the Mufindi district of the Iringa region, is located at an altitude of between 1,100 meters and 1,550 meters. The rainy season extends from November through May. By 2008, 1,600 ha of an 8,000-ha plantable area (from a total of 11,600 ha of Idete land acquired by Green Resources) had been developed, generating a potential 172,471 in temporary certified emission reductions (tCER) per annum (Green Resources 2008).

The company estimates that total production over 20 years will generate almost 2.6 million tCER from Idete alone. In 2009, Green Resources revealed that potential tCERs of over 6 million by 2020, sold at US\$6 per estimated emissions reduction, would generate US\$36 million in revenue for the crediting period, a huge ongoing windfall for the company considering that under CDM rules, the accumulated carbon can be sold every five years.

Despite these enormous sums, Green Resources (2008) has described the economic challenges facing carbon offset projects in Tanzania as beset by a "high level of risk, low and uncertain tCER price, and high cost of project development and implementation." Institutional and social obstacles include limited government understanding of the carbon certification process and difficulties innate in government procedures and bureaucracies for approval, as well as similarly limited understanding on the part of communities (Green Resources 2008). The company further added in their presentation, "Overview of Plantation/Certification Development in Tanzania," that stakeholders and communities had very high expectations of perceived benefits. Moreover, the company declared that private investors were placed in a disadvantageous position. "While there are large amounts of funding

available for forestry and carbon activities, very little of this benefits private companies,” Green Resources stated.

We estimate that private companies receive less than 2 percent of the public funding available for forestation and carbon. In order to increase all the activity aimed at combating climate change, in particular in Africa, funding agencies should provide much increased grants to the private sector (Carbon Positive 2010).

According to the company, project costs per hectare ranged from US\$400-US\$600 (Green Resources 2008), but the land is leased for a 99-year period from the Tanzanian government at just 2.3 Norwegian krone—less than US\$0.36—per hectare, generating just under US\$4,200 per year for Idete’s lease (NorWatch 2009). Though this represents a decrease of two-thirds from previous land-lease prices, former managing director Ivar Løvhaugen strongly criticized even this miniscule amount of money for the host country, arguing that lease prices should be reduced as much as possible to diminish risk. His thoughts were echoed by John P. Haule, managing director of a subsidiary owned by Green Resources Ltd. (then known as Tree Farms), who announced that leasing charges must decrease by 50 percent to 750 Tanzanian shillings (NorWatch 2009).

Green Resource’s head, Mads Asprem, further explained to Norway’s civil society group NorWatch last year:

It is interesting to note that the demand for land in Tanzania is very low and that there is little development within forestry and agriculture. The conclusion can only be that the price of land is too high (NorWatch 2009).

The company has pledged to reinvest 90 percent of revenue back into further projects and said the two villages leasing land will receive 10 percent of the profit generated from carbon credits (Green Resources 2009). But according to Karumbidza,

What Green Resources is doing is exporting the problem of pollution generated abroad to Africa. Tanzanians are receiving little in the process. This will become more evident in ten or 15 years when groundwater is depleted by wood plantations. The exploitative nature of the deal is especially evident in the fact that it was negotiated not in hard currency but Tanzanian shillings [which are] subject to currency depreciation. Tanzanian communities can expect to receive several million Tanzanian shillings from the carbon credit revenue in 15 years—whatever that is worth. (Sharife 2010a.)

Though Green Resources—the first company to receive Voluntary Carbon Standard (VCS) certification outside of the U.S.A.—has claimed that thus far the

company has reaped no profits after twelve years of operation in Africa, plantations will soon be fully grown and ready to harvest (Carbon Positive 2010). Time will tell whether reforestation CDM projects are “sustainable,” but to add to the doubts, consider the deeper theory and political history of carbon trading.

### **The Price of Pollution and the Privatizers of the Air**

REDD projects of this sort are not unusual within the industry now attempting to commodify the air. Jack Cogen, president of NatSource, the world's largest buyer of private carbon credits with more than US\$1 billion in monetized “natural” assets, bluntly characterized the mercenary nature of the business when he said: “The carbon market doesn't care about sustainable development.” (Wysham 2005). “All it cares about,” he continued, “is the carbon price.” The idea of pollution trading to solve the climate crisis was muscled into the Kyoto Protocol by the then U.S. Vice President Al Gore, using the sulfur dioxide model of the amended Clean Air Act (1990). The basic principle is colonization of the atmospheric “commons” by privatizing access. This is accomplished by granting major polluters—multinationals exploiting fossil fuels—durable and enforceable property rights to the atmosphere under the guise of incentivizing the reduction of carbon, which accounts for 75 percent of greenhouse gas emissions.

The logic of the cap-and-trade system—managing negative commons, or dumps—requires multinationals to purchase credits or allowances, should companies exceed government-allocated caps. These credits, mainly financed by taxpayers and consumers in developed countries, are often provided free of charge to polluters. In a 2009 legislative strategy by U.S. Congressmembers Henry Waxman and Ed Markey, the U.S. permits were estimated at \$646 billion in a potential worldwide market of US\$3 trillion by 2020. But in 2012 alone, \$55 billion or 69 percent would have been freely peddled to industry, with multinationals receiving 15 percent in free permits to “cover their increased costs from the global warming protection program” (Johnson 2009).

Yet despite permits constituting “deferred taxes,” it is not government that quantifies the level of emissions, but multinationals themselves. This facilitates a process where corporations inflate emissions, paving the road for two possibilities: allowing multinationals to control the price of pollution, artificially depreciating it via mass sell-offs (as has been the case in Europe's stagnant markets), or alternately, creating artificial scarcity in order to profit from stashed permits. Since permits have been commodified, cancellation or withdrawal requires governments to finance corporate losses, once again using taxpayers' funds. This of course brings back unpleasant memories of the U.S. taxpayer-funded “bank bail-out.” Though Goldman Sachs—which played a key role in creating the speculative bubble in the U.S. housing market that sparked the worldwide economic downturn and ensuing

hardship for millions—is posting profits, the masses who lost their homes were not so lucky.

According to David Victor, “the initial allocation creates expectations that the permits will be durable assets—governments might adjust allocations around the margins, but once distributed, the permits would become assets that, like other property rights, owners will fight to protect” (Victor 2001). Crucially, it also legitimizes the rights of polluters to monopolize the negative commons by exhausting already decreasing atmospheric capacity (projected at 500 billion metric tons in the next four decades at present rates), preventing former colonies and emerging nations from using their share of carbon sinks. And as most governments withdraw free meal tickets from multinationals that cease polluting, permits actually incentivize the use of fossil fuels, undermining innovation in renewable technologies.

In his position as chairman of the International Emissions Trading Association representing over 170 corporate bodies, NatSource president Jack Cogen’s logic of markets resonated perfectly with corporate entities interlocked at the diplomatic and board level with revolving-door officials. Likewise, it is a logic perfectly integrated with corporatized climate discourse. Conveniently, for example, there was little mention of the real roots of global warming in Nobel Prize recipient Al Gore’s Oscar-winning film *An Inconvenient Truth*. Kathleen McGinty, NatSource’s vice president of asset management, was the former aide to Senator Al Gore before rising to the position of key environmental advisor during Bill Clinton’s presidency. Goldman Sachs holds a 10 percent share in Al Gore’s Chicago Climate Exchange—the U.S.’s pilot carbon trading program, which effectively went bankrupt in late 2010 due to the lack of U.S. climate legislation mandating cap and trade. Meanwhile, Goldman Sachs employees like Ken Newcombe, former head of the World Bank’s Climate Change Capital, remain extremely influential.

Initially, the U.S.’s sulfur program, the progenitor of Kyoto’s cap-and-trade scheme, was shaped by Enron, the disgraced U.S. energy giant that began as an obscure natural-gas pipeline corporation based in Texas. The scheme enabled the corporation to dominate the newly created \$20 billion commodities market facilitated by the revamped Clean Air Act’s sulfur trading program, which authorized emission trading (U.S. EPA 1990; see also Renewable Energy Policy Project 2000). Since the late 1970s, the U.S. Environmental Protection Agency, mandated with the right to regulate emissions, initiated an offset scheme for power plants, which allowed multi-state corporations to engage in modifications aimed at enhancing the “efficiency” of existing plants. The lack of “trade” at that stage was due to the dearth of technology able to quantify emissions. “Not much has changed despite corporate claims to quantifying tools as justifying factors,” wrote Larry Lohmann, in *Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power*. “No

one has any idea how to calculate [the climatic value of biotic] offsets. Nor is it likely they ever will" (Lohmann 1999).

Enron's success in deregulating the trade in electricity came courtesy of intensive lobbying in Washington by revolving-door personnel like Wendy Gramm, as well as the financial wizardry of economic mercenaries stationed at Arthur Andersen, previously one of the world's major accounting firms. Five weeks prior to joining Enron's board of directors, Gramm—chairwoman of the Commodity Futures Trading Commission since the late 1980s days of George H.W. Bush's vice presidency—forced through key regulatory exemptions shielding Enron's books from public interrogation and government oversight. As early as 1989, Gramm issued policy memos lobbying for deregulation. Later, legislation pushed through Congress was delivered by Gramm's husband, Texas Senator Phil Gramm, who by 2008 had become a leading official at the Union Bank of Switzerland, Europe's largest bank. In the Senate he authored and co-sponsored the 11,000-page Commodity Futures Modernization Act, which prohibited government from regulating derivatives and other toxic financial instruments, including trading of energy commodities (Fox 2003).

According to emails made public following investigations on Enron, the gap in the Act (U.S. Congress 2000, 262) dumped on Congress a few days before Christmas in 2000—the Enron “loophole”—was backed by important agents of deregulation such as then-Treasury Secretary Larry Summers and U.S. Federal Reserve Chairman Alan Greenspan (Corn 2008). Excerpts from the email (available at <http://www.enronexplorer.com>) make revealing reading:

Gramm needs to fully understand how helpful the bill is to Enron... The legislation eliminates concerns that our derivatives transactions may be illegal or that our online platforms may be unregulated futures exchanges... Without this legislation the industry will be crippled... Senator Gramm has been contacted by a number of people urging passage of the bill. This clearly has had an impact. Senator Gramm appears committed, and he and his Staff are very focused... As the Bush transition moves forward, we need to monitor (or perhaps try to influence) the selection of the new CFTC Chair/Commissioners. (Lipton 2008.)

Arthur Andersen's and Enron's falls from grace signify deviant acts on the part of corporate mercenaries, yet such activities remain endemic to the global financial architecture. The International Accounting Standards Board, founded and financed by the “big four,” deliberately prevents corporate country-by-country reporting, which would indicate economic activities in host and home countries. This practice enables corporations, which now conduct 60 percent of global trade within rather than between entities (Sharife 2011), to self-regulate global trade. Unsurprisingly, the big four—in addition to 430 major banks, 70,000 corporations, 720 insurance firms, among other trusts, funds, foundations and corporate vehicles—are registered in the



world's largest secrecy jurisdiction, the Cayman Islands (*Ecoy Business Online* 2011). Under such an arrangement, little will trickle down to the Third World.

### Gaming Carbon Trading

It was at the Rio Earth Summit, where the UNFCCC was adopted, that officials of the Chicago Climate Exchange (CCX), self-described as “the world’s first and North America’s only legally binding integrated emissions reduction, registry and trading system,” delivered a paper advocating “a market-based solution to global warming” (Knoll 2007). Founded just prior to the signing of the Kyoto Protocol by Richard Sandor, an economics professor known as “Mr. Derivatives,” the CCX owns the European Climate Exchange, is intimately linked to Gore, and had ties to the upper echelons of the UN. The founding members include major companies such as Ford, DuPont, and Goldman Sachs, all of whom which were instrumental as leaders in designing and financing the carbon market system (Sharife 2010c).

The collapse of the CCX in October 2010, when it announced it would no longer be trading carbon, was viewed as a huge setback for both the U.S. and the global industry. American President Barack Obama was widely reputed to have been a member of the Joyce Foundation, which funded CCX and Sandor with grants. Surprisingly, no mainstream U.S. media outlets appeared to report the whys and hows of the collapse, with the issue barely rendering a mention despite climate policy and business frequenting the news. Initially, CCXs projected profit margins ranged in the hundreds of billions. When Sandor—listed by *Time* magazine as one green-wrapped “hero” of the world for founding CCX—sold his 16.5 percent stake, he netted \$98.5 million (Ellison 2002). “The power of the free market is that it can restore nature’s wealth as it increases financial wealth,” he said then. Crain’s *Chicago Business* Washington, D.C. bureau chief Paul Merriam (2010) comforted readers with the statement that CCX would “continue trading carbon offsets generated by projects that consume greenhouse gases, such as planting trees.”

Like the derivatives bubble that caused the global recession, the carbon market and Clean Development Mechanism projects are vulnerable to gaming. One paper, “Scaling The Policy Response To Climate Change,” by Benjamin Sovacool and Marilyn Brown (2009), revealed a €4.7 billion scam structured around trifluoromethane (HFC-23), a greenhouse gas used as a refrigerant. More than 70 percent of CDM projects were based on HFC-23, a chemical that was deliberately produced in excess by corporations that then claimed to “offset” it in order to receive financial benefits via certified emissions reductions (CER) certificates. Sovacool and Brown’s study also evaluated 93 randomly selected CDM projects and found that “in a majority of cases the consultants hired to validate CERs did not possess the requisite knowledge needed to approve projects, were overworked, did not follow instructions, and spent only a few hours evaluating each case” (Sovacool and Brown 2009).

The UNFCCC has registered 2,582 projects and issued 476,762,324 CERs (UNFCCC 2010). The carbon-offsetting organization Carbon Retirement revealed that 28 percent of total funds received for CDM projects went to developing countries; 30 percent was received by banks and investors; 17 percent to company shareholders; and the remainder to taxes. The World Bank has proposed, through the Climate Investment Funds unit, that the Bank levy a fee of \$350,000 for each investment project, 40 percent more than standard development project fees (Bretton Woods Project 2010). The Bank's president, Robert Zoellick, has promoted the Bank to developing countries as the ideal vehicle to engage in climate financing, a strategy laid out in leaked World Bank documents (Sharife 2010c).

But it is not only through the World Bank that the foreign policies of developed nations are implemented. Aid represents another key vehicle. As *WikiLeaks* recently exposed, U.S. Under-secretary of State for Democracy and Global Affairs, Maria Otero, urged the Ethiopian premier and head of the Africa Union climate change negotiation's team, Meles Zenawi, to sign the Copenhagen accord, as it represented a point of departure for other discussions, or else (*The Guardian* 2010).

Even worse, the financing that developed countries persistently claim cannot be raised, could in fact be easily generated through a small financial transaction tax, either on cross-border financial flows—the Tobin Tax—or as has been recently developed in the U.K. on a wider range of domestic transactions—the Robin Hood Tax. Campaigners say such a tax could generate \$400 billion, chiefly from developed countries. Not only would this require information sharing on a multilateral basis as implemented within international agreements, but it would also allow for developing and developed nations to track and recover stolen wealth (Sharife 2010c).

The issue of climate must be broadened beyond “adaptation and mitigation” to a systemic overhaul, beginning at the fault line: the lack of political will on the part of systemically powerful polluting countries and corporations to correct imbalances of power in the market, and the unregulated nature of international trade and financial transactions. In this context, the UN's acceptance of cap-and-trade is debilitating. As far back as the UN's Rio summit in 1992, Gore's CCX declared the need to realize a “market-based solution to global warming” (*Reuters* 2008). This ideology bears resemblance to “growth” of the common cuckoo, brooding parasites that deposit eggs in the nests of other birds. Carbon capitalism destroys and marginalizes other living beings, voraciously feeding off host entities at the expense of host communities. If scientists are correct and the atmosphere can withstand only 250 billion metric tons more in our carbon budget before the planetary ecosystem hits bankruptcy, our choices, until the earth recovers, are limited to a zero-carbon future—beginning with drastic cuts in developed not developing countries. This means doing away with carbon capitalism and capitalism overall. The only other alternative is a zero-future.

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