

Why can't we clean up our own act?

The Kyoto Protocol allows developed countries to gain credits from cleaning up the developing world. Sounds good, but in this **Godwell Nhamo** sees the seeds of a new environmental colonialism.



Many readers are familiar with 2010: a year that will, for the first time bring World Cup Soccer to Africa. However, another year that labour, business and government should be equally familiar with is 2012. This is the deadline year by which developed countries must have reduced greenhouse gases (GHGs) by 5.2% based on 1990 levels.

KYOTO CLEAN DEVELOPMENT FUND GHGs cause global warming that results in climate change. Global warming threatens to have severe negative impacts on food production, natural ecosystems and human health over the next 100 years. There is also evidence that climate change may result in widespread population displacements in the future, an aspect that will increase poverty.

In 1992 the United Nations

convened the Convention on Climate Change (UNFCCC) which identified GHGs which deplete the ozone layer in our atmosphere and accelerate global warming. In 1997 the United Nations held a follow up conference in Japan to discuss how to address the issue of climate change and to work out how to reduce GHG emissions. The Kyoto Protocol, which applied to developed countries that are the biggest polluters was adopted.

It had become clear since the 1992 conference that developed countries were not doing enough to reduce harmful gas emissions. A proposal from Brazil put forward the idea of a Clean Development Fund (CDF), based on the polluter-pays principle. It proposed that a computation should be worked to calculate acceptable levels of greenhouse pollution and countries exceeding this should be fined.

Excess GHG emissions would be fined at US\$3.33 per unit. The proceeds of these fines would go into the CDF which would finance projects aimed at reducing GHGs. This proposal was resisted particularly by the USA and Australia which strongly disputed the idea of computations taking into account retrospective accumulations of GHGs.

It became clear that some kind of incentive needed to be worked out so that developed countries would buy into the Protocol. Thus the Kyoto Protocol (KP) Clean Development Mechanism (CDM) replaced the idea of the CDF. The KP entered into force in February 2005 and targets were set for developed countries to achieve by 2012.

The CDM works on a principle of developed countries accumulating sufficient carbon

credits in order to reach this 2012 target. This system of accumulating credits does not apply to developing countries, like South Africa, who have endorsed the Kyoto Protocol. It permits developed countries to invest in projects that reduce GHGs in developing countries and thereby to earn carbon credits or carbon offsets. CDM project sectors include energy, agriculture, industrial processes and waste management.

Under the KP, all GHGs (chief among them, carbon dioxide, methane and nitrous oxide) are converted to a common base of carbon dioxide - one carbon credit unit is equivalent to one tonne of CO₂e. This allows a monetary value to be attached to credits and permits trading on the international market. Those who need credits can buy from those countries who have gained excess credits.

A flexible market based mechanism, which asserts that if a country reduces GHGs it should get some kind of credit, was created. Hence we see a capitalist approach to environmental management. Buying and selling the air! The KP assumes that carbon trade will clean the atmosphere of excess GHGs, alleviate poverty and work towards the attainment of the Millennium Development Goals (MDGs).

Reducing GHG emissions in developing countries at an estimated cost of \$1-\$4/tonne of CO₂e is considerably cheaper than doing it in developed countries with costs up to US\$15/tonne of CO₂e. This is partly because developed countries have already implemented the less expensive

and less complicated projects aimed at reducing carbon emissions such as converting methane gas emitted from landfill sites (waste disposal dumps) into electricity. This cheaper CDM project has not however, in general, been embarked on by developing countries who are not expected to accumulate carbon credits. From this it can be seen that it is cheaper for developed countries to gain credits by implementing projects in developing countries rather than in their own.

Many see the idea of developed countries implementing CDM projects in developing countries as a progressive move. The atmosphere is after all something that we all share so it doesn't matter if we help to clean it in developing countries or developed countries. When developed countries implement CDM projects in developing countries they are helping these governments to clean up their act and are also achieving job creation, better health, generating more power and achieving other important development goals. Thus it is seen as a win-win situation.

THINGS ARE HAPPENING

By June 2004, investors worldwide had spent over \$260 million buying carbon credits. As of July 2004, there were 97 CDM projects in 27 countries generating about 222 million carbon credits. China is said to have about 49% of the global CDM project potential. The remaining portion is divided between the rest of Asia (34%), Latin America and the Middle East (6% apiece) and Africa (5%). The United Nations Environment Programme shows that by May

2005 there were 264 CDM projects. Of these, investments in biomass energy (energy generated from plant life such as sugar cane, maize, corn, soya) was the highest (28%) followed by hydropower (22%), agriculture (13%), and landfill gas (12%).

According to a 2005 document by the UK presidency of the European Union, the EU has set-up three key frameworks to support the CDM. These are the Public Purchase Programmes for Project Credits, Private Sector Investment via EU Emissions Trading Scheme, and Specific Capacity Building Initiatives. Some member states also have their own initiatives that run into billions of Euros. Other initiatives that are of interest are the World Bank's Prototype Carbon Fund (the largest), UNDP MDGs Carbon Fund estimating a budget of between US\$60-90 billion a year and EcoSecurities Ventures. The World Bank, for example, gives loans for the acquisition of carbon credits. It also has some CDM projects of its own in order to accumulate carbon credits to sell to the highest bidder when countries need carbon credits to meet the 2012 targets.

SOUTH AFRICA AND CARBON CREDITS

The KP advocates that each country party to the Protocol set up a strict monitoring regime led by a Designated National Authority (DNA). The Department of Minerals and Energy is South Africa's DNA tasked with regulating and approving CDM projects.

According to the GHG inventory of 2004 by the Department of Environmental Affairs & Tourism, which surveyed three main GHGs,



Grahamstown landfill

South Africa emitted about 347,000 GHG CO₂e in 1990 and 380,000 GHG CO₂e in 1994. This makes South Africa one of the top 20 GHG emitters in the world.

CO₂ primarily comes from the energy sector (comprising electricity generation, other energy industries, industry, transport, commercial, residential and industrial processes) and the industrial processes sector (made up of cement manufacturing, lime production, soda ash use, ammonia production, calcium carbide production, iron and steel production, ferroalloys production and aluminium production). Coal currently provides up to 90% of the energy for electricity generation and is expected to dominate power generation until 2040. As of 2000, the International Energy Agency estimated South Africa's CO₂ emission per person at 6.91 tonnes. This was in sharp contrast to Africa's average of 0.86 and the world's 3.89.

A CDM project to harness methane gas from such a landfill

earns carbon credits

The single biggest problem with CDM is its failure to allow developing countries to earn carbon credits. Even though South Africa is one of the highest GHG emitters in the world it is still considered a developing country which does not have to reach a 'clean up' target by 2012. China too is one of the largest gas polluters in the world but also does not qualify to accumulate carbon credits. This means they cannot trade in credits and receive the financial ability to clean up their own act.

As a result a number of developing Latin American countries are considering taking voluntary targets, which will earn them carbon credits. Costa Rica, for example, has produced their own Certified Tradable Offsets which they have put up for sale.

In Asia, India and China are the leading CDM countries. Landmark CDM projects financed by the World Bank Prototype Carbon Fund in China include the Jincheng

Coalmine Methane Power Generation Project, the Xiaogushan Hydropower Project and the Nanjing Steel Converter Gas Recovery Project. The Chinese however have spelt out the terms under which developed countries can implement CDM projects.

China's CDM protocol is spelt out in its *Interim Measures for Operation and Management of CDM in China of 2004*.

From the protocol, CDM projects have to be submitted for approval to the Chinese DNA and it limits the eligibility of project owners to Chinese funded or Chinese-holding enterprises. The regulation excludes many foreign owned enterprises from implementing CDM projects. In terms of benefit sharing, revenue from the transfer of carbon credits are owned jointly by the government and the project owner, with allocation of the ratio of the revenue to be decided by government. The government also reserves the right to review and approve the price as well as the commercial terms of the carbon credit transaction. This has been done to protect Chinese interests in a market which is characterised by imbalances in negotiation power and knowledge of the market, risks, commercial terms, and contracts.

A 2003 paper from the Tyndall Centre for Climate Change Research mentions equity (empowerment of disadvantaged people), job creation and poverty eradication as principle indicators of sustainable development identified by CDM stakeholders in South Africa. Other indicators are: environmental improvement and enforcement of regulations, rural development (affordable energy),

human development (adult basic education and skills development), and sustainability of projects (technology training and provision of basic infrastructure) as well as empowerment of the disadvantaged through participatory environmental governance.

But what happens if countries like South Africa, Brazil and India as developing countries are required to reduce their GHGs under a revised KP after 2012? They too will have to meet targets and earn credits. But all the 'easy' CDM projects will have already been taken by the developed countries. So these developing countries will have to pay higher costs to implement more difficult projects because the developed countries have used the less expensive projects to gain their credits. This smacks of environmental colonialism.

The current CDM system is a passport for continued pollution by the developed countries thereby destroying the quest for global environmental and ecosystems sustainability. They don't have to clean up their own pollution they just have to get enough credits no matter where they get them.

In South Africa there are a few initiatives that require local companies to earn credits. The King II Report emerged from a group of southern African directors meeting to discuss what should be done about cleaning up the environment. The JSE

(Johannesburg Securities Exchange) also holds a Socially Responsible Investment Index by which companies are measured for corporate social responsibility. So there are already opportunities for local environmental sustainability investments in South Africa.

Corporate South Africa may need to think long term about investing in a local version of the CDM. The government might also start thinking of enacting enabling legislation to harness, especially landfill (waste disposal) methane and earn carbon credits for its future generations. Once identified as priority areas, resources can be sourced locally or at least have significant budgets from local partners so as to claim a real stake in the CDM or outside it.



But where does labour come in? The current CDM and the arguments in this article mean that labour needs to think long term too. If South Africa finds it difficult to expand its industry in half a century to come because of excessive environmentally damaging gas emissions, then there won't be employment opportunities to talk about.

SOME RECOMMENDATIONS

The stable investment climate in South Africa means that it is a 'hot' CDM project host for developed countries. However, due to various risks, uncertainties and ignorance associated with the CDM, there is a need to apply precautionary principles in such dealings. The

following principles could help:

- *South Africa needs to enact firm and flexible stakeholder driven CDM regulations at national, provincial and local government levels.* There is good stakeholder communication between government, industry and civil society which all participated in the UNFCCC in 2003. But studies have shown that South Africa is weak on inter-ministerial and departmental coordination.
- *CDM project quota systems need to be put in place to safeguard biased investments in easy sectors for carbon credit picking such as landfill gas and hydropower.* The government should stipulate the number of projects that can be done in which areas.
- *There is a need for a capacity building and sustained awareness raising programme at all levels of government, including amongst traditional and community leadership.*
- *Local financial resources need to be mobilised through the King II and JSE Socially Responsible Investment Index which can earn government and other local players 'carbon credits' for the benefit of the environment*
- *We need to continuously engage with the CDM and raise questions.*

Let us continue opening up CDM debates and be informed.

Godwell Nhamo is a postdoctoral fellow for Environmental Policy Research in the School of Geography, Archaeology and Environmental Studies at the University of the Witwatersrand.