Waste pickers

Solution to climate change?

In the previous *Labour Bulletin* **Kally Forrest** wrote about how waste pickers in South Africa are getting organised. In this second article she explains how waste reclaimers can play an important role in preventing climate change – but there are forces hostile to waste picker recycling, which they will have to fight.

Recently I was asked what I do now that I am no longer *Labour Bulletin* editor. I explained I was working with waste pickers. The person responded, 'You have just published a book about metal workers at the top of the value chain, auto workers and the like, now you have dropped to the bottom of the chain'.

Although this comrade was joking, this view is shared by many people who see waste pickers as the lowest form of worker grubbing in gutters and on rubbish dumps. But my recent work with waste collectors gives me a different view: that their work lies at the core of saving our planet.

ELIMINATING WASTE

Bulletin has written much on climate change (*SALB 35.2*). Briefly some places in the world are experiencing too much rain and flooding whilst in others water scarcity is a huge problem. Yet other places are facing an increase in forest fires and in the Antarctic and Arctic the ice is melting so rapidly that rising sea levels are forcing people along the coast to leave their homes.

The air we breathe forms a blanket around the earth and keeps the temperature stable. However, when we burn things we release carbon dioxide and other greenhouse gases, which heat up the earth excessively. Methane is one of these dangerous gases.

But what has this to do with waste pickers?

A landfill is where people pick and sort waste and through this earn money to feed their families. But for municipalities and governments landfills are places which release greenhouse gases that pollute and generate heat.

Engineers have a number of solutions for the release of these gases. These include creating 'wells' in landfills which burn off gas; burning the waste in big incinerators; or capturing the methane gas on a landfill using pipes.

Many governments favour incinerators to control landfill pollution. But incinerators are hugely expensive. In Frederick County, Maryland in the United States for example, building one incinerator costs US$43-billion dollars.

However, an advantage of the incinerator is that it produces energy (electricity) in a process known as waste-to-energy (WTE). So municipalities favour incinerators which destroy waste whilst producing energy. But there are problems with WTE. Burning waste releases carbon dioxide whether in cardboard, plastic or paper and incinerators release toxic emissions and ash into the atmosphere.

Companies also capture landfill gases by inserting pipes into the waste and syphoning off the methane, which is then converted to energy. But this is also not a reliable method as toxic methane escapes into the air.

The one method that municipalities do not favour is recycling, but this is the best solution.

BENEFITS OF RECYCLING

Paper and cardboard are made from wood so when municipalities burn paper on landfills this means more trees have to be cut down to manufacture more paper. But if waste pickers collect paper and cardboard and sell it for recycling, thousands of trees can be saved and forests are 'sink holes' known to absorb carbon dioxide.

Plastic is made of oil so when municipalities burn plastic waste, more plastic must be manufactured in polluting factories at a time when oil is in short supply. Recycling plastic on the other hand means that industry can reuse the same material and make new products.

All material that is recycled including metal has a good effect on climate change as it prevents waste and pollution. Recycling eliminates the burning of waste which releases greenhouse gases into the atmosphere. So when waste pickers recycle they prevent harmful climate change impacts.

Surveys of waste incinerators in the US and India show that they do not greatly reduce greenhouse gases. These studies however show that there is a 25% reduction in gas emissions when pickers compost and recycle. In Delhi, where waste collectors recycle, studies show that they protect the environment a great deal more than incineration does.

So why do governments prefer WTE to recycling?

Industry is taking advantage of climate change for its own profit. Companies persuade municipalities that their methods of removing waste are the most effective. They ignore recycling as this is bad for business.

There is a conflict between recycling and WTE. In India and Senegal waste pickers are facing the closure of landfills as municipalities use less effective incinerators and landfill gas capture.

Wet waste, or food waste, rots on dumps and without contact with air produces methane. The solution therefore is to keep wet or organic waste out of landfills and through constant rotation produce-rich compost for agricultural use.

In Indonesia pickers collect organic waste from hotels and then compost and sell it. Hotels pay them to remove the food and they also make money from selling compost.

The other possibility is to feed wet waste to animals such as pigs.

The third possibility is to make biogas. A small biogas plant consists of a concrete sealed chamber into which food waste is placed and covered with water. The chamber captures the methane which people can then use to cook or for electricity. Indian waste collectors do this successfully and sell the gas.

In all these cases separating dry and wet waste from the beginning is important as it is difficult to separate after it has been combined. Organic waste should never be mixed with other waste such as plastic, metal and paper as it is obviously bad for animals and plants. Businesses and homes need to separate waste for collection.

Almost everything that incinerators burn can be recycled. Recycling is cleaner and does not emit toxic ash and fumes. Recycling also creates at least ten times more jobs per tonne of waste than incineration. Recycling also has better effects on the climate as it eliminates most greenhouse gas emissions.

PROMOTING RECYCLING

Waste pickers everywhere face the possibility of losing their jobs. If landfills get too full, municipalities close them and people lose work. The best option is to aim for *zero waste* through recycling, composting and using biogas to create power. This will ensure that landfills have a long life with continuous employment for waste collectors.

Waste reclaimers however need to actively promote this better alternative.

In South Africa the National Environmental Management Act (2008) includes a section called *Waste Management,* which speaks of the minimisation of waste whilst promoting re-use or recycling.

Alongside this goes the National Waste Management Strategy, which assists in the implementation of the Act within time frames.

Section 51(1)1X of the Act is the most important for waste pickers as it lays out the conditions for salvaging waste. It also gives waste reclaimers the right to access dumps and to recycle.

Government realises that recycling must increase. The law no longer allows municipalities to simply collect and dispose of waste so waste pickers need to take advantage of this.

Through recycling South Africa can improve its economic growth as pickers engage in the waste economy across the country. Only 50% of South Africans have their waste collected as rapid urbanisation and growth of informal settlements means that government cannot keep up. This makes waste pickers even more important.

After long discussion between government and civil society a Waste Management Hierarchy was agreed. Firstly manufacturers must decrease waste by reducing the over-packaging of products. Then industry must re-use whatever it can. What industry cannot re-use should be recycled and composted. What cannot be recycled must be burned to create energy for electricity. Whatever waste remains should be dumped in a landfill as the *last* option.

Government wants to see creative thinking around the implementation of this strategy. If this hierarchical approach is adopted South Africa can get close to zero waste.

Waste pickers need to approach the media and government to promote recycling and argue against other less-effective technical solutions. They need to package information about the benefits of recycling to present to government otherwise company engineers will advise municipalities otherwise.

Pickers can achieve almost zero waste, which is a complete answer to municipalities' problems. However they need to push their services otherwise companies will promote their inadequate services for large profits.

Composting requires land which waste reclaimers do not have. They need to approach municipalities to provide land in the way pickers at Mooi River have done.

If the municipality shows no interest, there are other helpful government departments such as Agriculture and Environmental Affairs which can persuade municipalities to engage in joint projects. Some pickers hold monthly meetings with these departments to discuss such issues.

Pickers can easily run communal composting projects. However in order to compost, waste must be separated at source and collected from households. This worries some collectors as they believe landfills will be emptied. This is a thorny issue between landfill and street pickers.

In the city of Pune in India street and landfill pickers work together and go door to door collecting separated wet and dry waste. Then they make biogas from wet waste and recycle the dry waste. This means both pickers get direct access to waste.

South African pickers need to get organised and cooperate with each other so that all pickers benefit.

CDM THREAT

Unfortunately there is a threat to waste pickers doing recycling from the Clean Development Mechanism (CDM), which operates under a climate-friendly cloak.

CDM is an international institution created by 192 governments who signed an agreement in 1997 on reducing greenhouse emissions. It oversees the world's waste system but is a dismal failure. It awards finance to companies providing landfill gas systems and incineration claiming to reduce emissions by burning waste. CDM does not support recycling projects.

CDM projects operate worldwide. In Dakar, Senegal, the government aims to close the huge Bokk Diom landfill and open a new one using incineration to get CDM credits and finance. Thousands of waste pickers are fighting this.

In Delhi, India at Oklha a CDM project has made 10 000 waste pickers redundant. The CDM financed a company which installed an incinerator and is also building other incinerators in India. The government received finance for implementing this project so it ignored waste pickers' protests.

Bisasar Road landfill is a CDM project in Durban. The project claims it is removing methane and using it to generate electricity for the poor. In reality it is inserting pipes into the waste and selling the methane to Eskom. The company has fenced off the landfill so pickers cannot get access.

CDM projects affect the world's poorest as they destroy thousands of jobs and fail to see the beneficial impacts that waste pickers can have on climate change. Said one waste picker, 'South Africa is a democratic country and this incineration machine is not democratic and it must go back to where it came from as it is only creating two jobs. We don't need it.' LB

Kally Forrest is a former SALB editor and freelance writer. Thanks to Neil Tangri of Global Alliance for Incinerator Alternatives, Musa Chamane of Groundwork, Women in Informal Employment Globalizing and Organising, and the South African Waste Pickers Association for information provided.

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TB in mining industry

The spread of tuberculosis among mineworkers can be controlled if government takes a firmer stance and living conditions are improved, writes **Peter Bailey**.

The mining industry has a huge legacy of uncontrolled and unmonitored occupational tuberculosis (TB) disease that workers get by inhaling silica dust. To add to this there is also the normal TB, which is caused by the way mineworkers work and live.

TB has led to hundreds of mineworkers being repatriated or medically boarded to become a burden to their families and the state.

In 2010 the industry sent home over 2 000 workers of whom 300 died and new infections are increasing daily. An analysis from the Department of Mineral Resources (DMR) annual report 2009 – 2010 as per each commodity shows shocking results.

In 1995 the Leon Commission of inquiry into mine health and safety concluded that exposures to dust have remained unchanged in 50 years. This situation has been confirmed by a number of studies.

The National Union of Mineworkers (NUM) has been arguing that the compound system is the major contributor to the spread of TB in the mining industry hence there is a need to speed up provision of decent housing for mineworkers.

It is estimated that for every fatal accident, five workers die from occupational diseases. We can then safely assume that to date about 75 workers who were employed in the mining industry have succumbed to occupational disease silently at their rural homes.

The South African government has estimated that the TB infection is amongst the highest in the world and the DMR report shows that.

Gold mines

An increase in silicosis cases provides evidence for previous exposure to high levels of silica dust, not current exposures. This implies that only when silica dust exposure levels are not exceeded, will silicosis be eliminated, thus achieving the milestones. It is for this reason that focus should be on dust control measures as per the Mine Health and Safety Council milestones, which aim to eradicate silicosis. Ideally there should not be any new cases of silicosis by 2013 of employees recruited from 2008 who had never been exposed to silica dust before.