#### CHINTAN Fact Sheet





#### Waste, Wastepickers and Climate Change

This fact sheet will help you make the linkages between waste, wastepickers and climate change, and help you think of some solutions.

# What are the connections between waste and climate change?

Let's begin backwards-at the point before waste becomes waste, when it is still a product or a material. Producing anything requires several resources and therefore, results in greenhouse gas emissions (GHG emissions). For example, producing even a coir mattress requires coir, aluminum or other metallic springs and other raw materials to be transported to a factory, which uses energy to manufacture the mattress, which in turn must be transported across the country and even abroad, to shops from where consumers buy them. All this results in greenhouse gas emissions.

As a result, every product, howsoever green, already has a carbon footprint. Waste only adds to this in various ways. Infact, some sources say that only 1% of the materials used in a product last longer than 6 months. Think of the quantity of waste every product creates.

**First**, when it is disposed off in a landfill. This is particularly true of organic waste and other waste that decomposes, like paper. As this waste disintegrates in landfills, it emits methane, which is 21 times more potent than carbon-di-oxide.

Second when it is incinerated. Incineration produces carbon-di-oxide, which is a green house gas, as a byproduct. Another problem is that by incinerating waste, materials cannot be recycled, or reused, which is a GHG reduction opportunity cost lost-recycling results in less GHG emissions than incineration.

Third, carbon di-oxide is also produced when we burn waste in the open, as we often do when it remains uncollected.

Fourth, every time waste has to be transported for centralized handling, the transportation itself results in GHG emission.

And finally, the fact that waste is produced means new products are required. And as you know from the example of the coir mattress, this means even more GHG emissions.

# How serious a problem does solid waste pose for climate change?

According to the United Nations Environmental Programme (UNEP), "At a global scale, the waste management sector makes a relatively minor contribution to greenhouse gas (GHG) emissions, estimated at approximately 3-5% of total anthropogenic emissions in 2005. However, the waste sector is in a unique position to move from being a minor source of global emissions to becoming a major saver of emissions."

### How well does India handle greenhouse gas emissions from its waste?

India handles emissions from waste badly. The evidence lies in the fact that our GHG emissions from waste are about twice that of other Asian countries. To be fair, it seems that at least some Indian policy makers are aware of this, because solid waste is part of the National Action Plan on Climate Change of 2009, in its section on Sustainable Habitat.

### How are wastepickers helping the planet win the battle against climate change?

In summary, they are our Cooling Agents. Not just wastepickers, but the entire chain of waste recyclersthe wastepicker, the person who collects trash from homes, the kabari-wallah who buys newspapers, the small waste dealer who buys all the waste from the kabari wallah and the wastepicker, the big dealers who buy from the small dealers and finally the people who work in and operate the thousands of recycling factories across India-all these are our Cooling Agents.





They are not only the only recyclers in India, but also, their work is a key reason why upto about 20% our waste does not end up in landfills, or is burned.

Recycling is an important way by which GHG emissions from solid waste can be prevented. Our wastepickers and informal recycling sector provide us with this free service! Even the UNEP agrees, when it says, "The informal waste sector makes a significant, but typically ignored, contribution to resource recovery and GHG savings in cities of developing nations."

#### Something you would not guess!

Chintan calculated the greenhouse gas savings by the informal sector in Delhi. Using the most conservative data, we found that the waste recyclers of Delhi were saving 3.6 times more greenhouse gases than any project that was receiving carbon credits across India, for waste handling. Sadly, they were not being rewarded for their outstanding work.

#### How can we be part of the wastepickers efforts?

It's simple. Help them recycle more waste in a safer way. Data from rich countries shows net carbon emissions are four to five times lower when materials are produced from recycled steel, copper, glass, and paper. They are 40 times lower for aluminum, and between 4 to 8 times more energy is used for manufacturing some kinds of common plastics from virgin.

#### Here is how you can support recycling:

Walk around your neighborhood and see who the local wastepickers are. Ask them to come over everyday at a fixed time and make sure they get all your waste.

Ideally, segregate your waste into wet and dry, so each type of waste can be handled optimally. Hand over glass, blades etc separately, so no one gets hurt.

Work with your neighbourhood to ensure you set up a collection system where local wastepickers and take your waste away. You can tell who is a wastepicker if they have a bag full of trash, and if they have already been picking waste from the roads, or bins or even, a few houses.

Work with the municipality to help the wastepicker get a space to segregate and store the waste. It is ideal if they also have a space to wash their hands, to prevent several illnesses after they touch waste.

Give the wastepicker an I-Card or a letter of permission to come to your locality -and introduce them to the guards, if there are any, so they don't get beaten or harassed for entering your area. Help them look smarter-get them to wear a uniform or at least, neat clothes. Give off some from your own locality.

**Don't give off newspapers** to anyone except to the kabaris who come on cycles and buy them. If you like, you can give the papers for free.

If you like, you can offer them some tea, especially when it is cold.

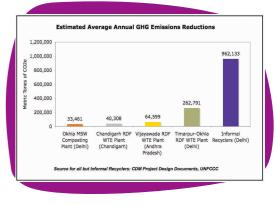
And last of all, don't forget to pay the service fees and motivate your entire neighbourhood to do so.

### What can we do to reduce GHGs while handling our trash?

Apart from working with the wastepickers, you should compost your waste. If you don't, it will reach landfills and emit methane. Or someone will burn it.

More than handling trash, try to produce less of it. Buy less disposables and one-time use packages, make your things last-don't get fed up of them soon. Best of all, get brave and just try to own less things. Declutter.

# Waste recyclers save more green house gases than many technologies:



Each of the plants mentioned in the graph above have received carbon credits for reducing greenhouse gas emissions. But the waste recyclers of Delhi, who save over 3.6 times more than these plants, have received nothing from anyone.

#### **References:**

Cooling Agents (2009). Chintan Environmental Research and Action Group. www.chintan-india.org.

Sheehan. B. (October 2000). Zero waste, recycling and climate change (2000). Grass Roots Recycling Network www.grrn.org/zerowaste/climate\_change.html

Waste and climate change: Global Trends and Strategy Framework (2010).

www.unep.or.jp/ietc/Publications/spc/Waste&Climat eChange/Waste&ClimateChange.pdf. United Nations Environment Programme (UNEP)

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