What is this Action Sheet about?
It’s about plastic bags and how to stop them becoming a menace to society and the environment.

What is the problem with plastic bags?

Over the years plastic bags have replaced natural materials as a cheap, quick way to package food and carry shopping. The problem is that plastics are **non-biodegradable**. They won’t rot down for 10,000 years or more. When they are carelessly thrown away, they collect around the city, choking drains, threatening small animals, damaging the soil and polluting beaches.

Plastic litter (Image: Sarah Watson, PACE)

**Plastic waste looks bad**

“Plastic waste has had a terrible impact on tourism, particularly on the beaches east of Accra, where rain water carries the waste,” Ghana’s Tourism Minister Jake Obetsebi Lamptey told the IRIN News Service. “And the visible mountains of refuse in Accra give foreign tourists the impression that Ghana is a filthy country.”
Plastic waste kills wildlife

More than 1 million birds, 100,000 whales, seals and turtles and countless fish worldwide are killed by plastic rubbish every year (Laist, 1997). This mainly happens by marine creatures becoming entangled in or accidentally swallowing or choking on floating plastic. In April 2002, a Minke whale was found stranded on a beach in France with approximately 2 pounds of plastic bags and packaging inside (GECC, 2002). Estimates run as high as one million pieces of plastic per square mile floating in the Pacific Ocean!

Plastic waste kills livestock

Plastic bags littering the countryside are also a danger to livestock. Grazing cattle eat them and die when the bag becomes entangled in their stomachs. Farmers, especially those who farm near towns, often report this problem (Dreyer et al, 1999, Rasmussen, 1999).

Plastic poisons and pollutes

Plastic is made from oil and coal, materials that are both unsustainable and non-renewable. Mining, transport, energy production and petrochemical processes all damage the environment. In this way, plastic production contributes to problems such as oil spills, toxic emissions, and global warming through the release of greenhouse gases. If you decide to burn plastic to try to get rid of it, there are also problems. Dioxins and furans are two highly toxic chemicals created unintentionally during plastic incineration.

What can we do about the plastic problem?

Reduce, re-use, recycle!

Plastic bags are everywhere and they don’t disappear when we throw them away. It makes sense for everyone to reduce their use of plastic bags. The more people who bring their own re-useable non-plastic bag to the shops, the less plastic bags are needed.

If you already have plastic bags, you could re-use them several times yourself. Thick plastic bags are easier to re-use, and they are also easier and more profitable to recycle. Find out whether plastics can be recycled where you live.

Campaign!

Campaigns to change the law about plastic bags have been very effective in many African countries. Here are some success stories from countries that are dealing with the plastic bag problem.
Botswana’s answer to the plastic bag problem

When people started voicing their concern at the widespread use and disposal of plastic bags, staff and volunteers at Somareleng Tikologo, a non-governmental organisation in Botswana, decided to do something about it. Following a workshop at which government authorities, stakeholders from private companies and members of the general public met to discuss possible solutions to the “Plastics Menace”, the Plastics Petition Campaign was launched.

The Petition requested that the government take action on the following points:

- Shops should only stock plastic bags thicker than 60 microns (a micron is 1 thousandth of a millimetre). Stronger, thicker plastic bags are re-useable and easier to recycle than thin bags
- Shoppers should pay for the stronger bags, so that they would be more likely to re-use them than throw them away
- Manufacturers should make sure that plastic bags are made of materials that can be recycled more easily
- Manufacturers, distributors, and retailers of plastic carrier bags should apply environmental policies for the management and disposal of plastic bags
- The use of recycled paper bags and cloth bags should be promoted

The petition was signed by over 3000 people, and presented to Parliament on the 28th November, 2000. The Parliament and the President of Botswana His Excellency Festus Mogae accepted the petition, turning it into a policy proposal for consideration by the Ministry of the Environment, Wildlife and Tourism. Several large shop chains now sell thicker re-useable plastic carrier bags.

PLASTIC FACT: Plastic bags are made from crude oil, natural gas, or other petrochemicals

TOUGH RULES - TOUGHER BAGS

Since 9th May, 2003, thin plastic bags have been illegal in South Africa. Shop-keepers found with these bags can be fined 100,000 ZAR (US$13,800), or face a 10 year jail sentence. Shoppers must bring their own bags to the shops, or buy the thicker, stronger plastic bags that are easier and more profitable to recycle. The government wanted to ban bags under 80 microns thick, but manufacturers were concerned that it would cost too much money to install new equipment. The minimum legal thickness for plastic bags in South Africa is now 30 microns.

The Eritrean government has also taken a firm line on plastic bags. Since January 2005, “those who import, produce, distribute or sell plastic bags are fined,” Wolde Yohannes, Head of Environment in the Ministry of Land, Water and Environment told the News 24 service. Kenya may soon follow suite: In February 2005, a report issued by the Kenyan government, the United Nations Environment Programme (UNEP) and the Kenya Institute for Public Policy Research and Analysis recommended Kenya take similar steps against plastic proliferation.

PLASTIC FACT South Africa uses 8 billion plastic bags a year.

Make and sell longer-lasting plastic goods by weaving with plastic bags

This is a good way to stop plastic bags from escaping into the environment, and it also earns people money. But be careful about building a business on plastic bags: If campaigns to reduce plastic bag use are successful, there may be less of them about, and you may have to pay for them, so it might not necessarily stay a profitable business.
The So Afr-Eco community group weave plastic bags into beautiful and durable bags, mats and hats.

First, the plastic bags are cut into strips. The strips are then rolled up ready for weaving, plaiting or threading.

Plastic baskets

Plastic mats or rugs . . .

Plastic hats . . .

Images: Sarah Watson, PACE
How to chain the bags together into a long string ready for weaving:

1. Stack handle bags in a pile. Ten is a good number.

2. Roll into tube, starting at the bottom.

3. Cut through the middle of all ten bags leaving one handle at the top of each side.

4. Poke a hole in the fused gusset at the bottom of one half-bag.

5. Loop the handle of another piece through the gusset hole, making a chain.

6. Keep chaining until you have a small ball. Your chain unravelled should be about 20 feet long.

The ball of plastic strips can be woven with traditional methods, which you may know already or can learn locally.

ACKNOWLEDGEMENTS: This Action Sheet was compiled by Nancy Gladstone and Alan Hesse, and is based on information from the following sources (web accessed January 2006):

BBC News report: South Africa bans plastic bags, BBC News website, Friday, 9 May, 2003  news.bbc.co.uk/1/hi/world/africa/3013419.stm


Institute for Zero Waste in Africa, The Problem with Plastics, Factsheet available from zerowaste@iafrica.com


Rasmussen, G. 1999 Livestock predation by the painted hunting dog Lycaon pictus in a cattle ranching region of Zimbabwe: a case study, Biological Conservation 88 (1999) 133-139

SOMARELANG TIKOLOGO, ENVIRONMENT WATCH BOTSWANA website (Waste Management page) www.st.info.bw/Waste_Management.html

Thanks also to the So Afr Eco community group, and to Chris Gustin for pictures and advice on weaving with plastic bags from www.homesteadweaver.com

Original cartoon by Alan Hesse.

FOR MORE INFORMATION

CONTACTS

So Afr-Eco
Somareleng Tikologo – http://www.st.info.bw/
Practical Action (formerly known as ITDG) – www.practicalaction.org

WEBSITES

www.homesteadweaver.com

For information on large-scale plastic recycling in general, see Practical Action (formerly known as ITDG) Technical Brief on Plastic Recycling www.itdg.org/docs/technical_information_service/recycling_plastics.pdf

www.recoup.org