CropLife Madagascar has found a unique solution to manage empty pesticide containers. By using locally produced machinery, a total of 7,000 containers will be recycled into sign boards and irrigation pipes before the end of 2012. The total cost of this recycling initiative is just US$0.14 per litre.

The containers, varying in size between 20 to 25 litres, were identified in six storage facilities around the country managed by locust authorities. About 90 per cent of the containers are made of plastic and the remaining 10 percent are made of metal. The project only collects containers originally imported by CropLife Madagascar members. The estimated cost to collect and destroy all of the containers is US$21,000. CropLife Madagascar will contribute US$12,000 to the project and the locust authorities will pay for the rest.

In 2007 and 2009, CropLife Madagascar collected 11,000 empty containers. At that time, no recycling opportunities existed and the programme disposed of containers by crushing and burying them. Newly established recycling companies now allow CropLife Madagascar to handle the containers in a more environmentally friendly manner.

Following collection, all containers are triple-rinsed. Because locust pesticide is an oil-based formulation, the first rinse requires detergent to thoroughly clean the containers. The rinse water is disposed of in a specially constructed basin where it can evaporate. The leftover residue is then destroyed at a local incinerator.

The process to recycle metal drums is surprisingly simple. Workers flatten the containers manually and the resulting metal plates are used as signboards. Plastic container recycling requires more effort. Workers use a bandsaw to cut the drums and then feed the shards into a locally made shredder, resulting in small plastic pellets. A local recycling company turns the pellets into irrigation pipes and other construction materials.

As is the case in many other African countries, there is no existing legislation in place for the management of empty pesticide containers. Instead, there is a general waste legislation act that designates the owner of the product as the owner of the waste, but there is no system for collection and disposal of empty containers. However, suppliers of pesticides have a contractual obligation to deal with the empty containers.

CropLife Madagascar concentrated its container management projects on large pesticide users, such as the locust control authority. Farmers are more challenging targets as they are not willing to freely give up their containers, which are valuable to them for storing water and cooking oil.
Empty containers

Sign boards from recycled metal containers

Triple rinsing

Locally manufactured shredder for plastic containers