Discussion paper

Use of Economic Instruments to Control & Finance Waste Management

What are they?

Economic instruments are market-based incentives or disincentives that aim to change behaviour or consumption patterns. Incentives will reward desirable changes whereas charges can be placed on goods or services to attempt to include the environmental and / or economic costs of waste management in the ultimate price the consumer pays at purchase (polluter pays). They can vary from

- a reduction in import tax for fuel efficient vehicles,
- payments for the return of glass bottles for recycling,
- a levy on production to reduce resource consumption,
- an import bond to ensure the removal or safe recycling or disposal of a product after its useful life,
- a tax at point of sale to ensure that the waste management costs are included in the sale price and providing clear consumer signals for competing goods,
- user pays charges to reduce the use of a "free" service.

> **Revenue generation**
> Cook Is allocates part of their Airport Departure Tax to waste management as the major economic beneficiaries are the tourism industry.

These all have various positives & negatives ie a user pays charge on waste collection may raise funds but encourage people to illegally dump & cost more in enforcement or clean up.

In some cases, the funds raised by economic instruments simply return to central treasury to be allocated in the normal budget process. **In other cases, the funds can then allocated to the waste management issues that they were raised to address**. A charge on plastic bags, could then be used to fund litter reduction, or plastic recycling or provision of alternate eco-friendly bags or all three. One charge could be used to prevent the problem & fund its solution.

> **Container Deposit**
> Kiribati has a 5c levy on cans & PET bottles – 4c is refundable to encourage collection, 1c goes to administer the scheme – no nett cost to government.

Economic instruments can be particularly suited to SIDS as the border controls are relatively simple, the indigenous manufacturing is limited or traditional methods rarely have the level of adverse environmental impact. Well chosen, they may be more administratively efficient than regulatory approaches requiring a strong enforcement capability. They also require extensive consultation and often legislative changes – this can delay their implementation.

How should they be used?

There are many ways to improve environmental management. Depending on the problem and the time appropriate to address it, a variable suite of responses will be needed. **Economic instruments for environmental management need to be part of an integrated policy package which may involve legislation and enforcement, education, and facilitation of whatever alternative behaviour that you are trying to encourage.**

The experience to date is that they do not appear politically unpopular like most new taxes if they are used to address a problem that has widespread public recognition eg plastic bags and as long as the funds raised are spent on fixing that problem. The necessity to build support means that extensive community consultation needs to be part of the policy development.

Any economic instrument has the potential for distorting markets and causing unintended consequences. A recent Solomon Is example of a Container Deposit on bottles was sufficiently lucrative that it was drawing children away from schools to collect bottles for an income until some changes were made to the system. **Any use of economic instruments needs good consultation to minimize any possibility of unintended consequences.**

The best point in the chain from production to consumer at which to levy the charge or apply an incentive depends on the problem and the circumstances of the country concerned. In the example of SIDS, an import levy on motor oil may be the most appropriate way to fund the collection of spent oil and its safe management. This is because the customs infrastructure already exists so the collection is administratively cheap and to collect it at point of sale has no advantage in displacing consumer choice to a more eco-friendly product since there is no current alternative to motor oils. Requiring importers to lodge a bond, refundable on repatriation, doesn't make sense either as it would require each importer to establish collection schemes, a task more efficiently handled by existing private or public sector waste systems. **Each issue needs full analysis, consultation and a complementary set of policy tools.**

Ban plastic bags
PNG's ban was stopped by very strong opposition from manufacturers and those with exisiting stocks.

An economic instrument may change the market place in a way that causes negative impacts on a particular sector. An import tax on inefficient cars would skew the market towards 4 cylinder cars, diesels and hybrids. While this may assist the country's balance of payments if it is an fuel importer, the importers of large capacity vehicles would sufficient notice to clear their stocks and orders or they will face financial hardship. **Sufficient lead times, phase-ins, or compensation provisions will ensure the transition does not cause undue hardship and will minimize political or legal opposition.**

When should they be used?

Economic instruments should be used only after proper analysis of the alternatives and secondary impacts. For example, the absence of any space or appropriate soil for landfills on atolls necessitates a strong emphasis on both waste minimisation and repatriation of difficult wastes such as car bodies, tyres or plastic packaging. The high cost of transport off the atoll could be mitigated by a levy on the imported cars which then assists the removal of the car body for overseas recycling. Thus the true cost of the car (at least in regards to the body's disposal) is reflected in its purchase. The higher price could also encourage a longer working life for the vehicle. The costs of buying a car will rise which is politically unpopular. A tax may also impact on free trade agreements. Good consultation would be essential to ensure strong public, business and political support. This will slow implementation.

An integrated package
Kenya has banned thin plastic bags and taxed the thick bags to fund incentives for sustainable alternatives.

Given that they are relatively new as a policy tool, advocates would be well advised to focus on one obvious issue that would generate broad popular support and use that as a pilot. That way, all sectors of the country can see first hand how these can work, provide input on the implementation and become comfortable with these useful policy tools. An obvious current issue with widespread support in the Year of the Turtle is the management of used plastic bags.

Recent studies into the true costs of poor waste management in the Pacific have highlighted the economic costs on health, fisheries, and tourism that can accrue from litter and leachate. These wider social costs can be used to illustrate the necessity of both improving waste management but also to help justify using economic instruments to minimize the problem and finance the solution.

As part of a complete package of command & control regulation, voluntary agreements, community consultation and support, economic charges and incentives can provide PICTs with a useful additional policy tool and on-going funding to improve waste management.