



© Geraldo Carreiro

Tackling the plastic tide

STORIES OF TRANSFORMATIONAL CHANGE

Inspirational examples highlighting transformations towards greater environmental and climate sustainability

A persistent problem – plastic pollution

Plastic is an omnipresent feature of our everyday life. The average human uses 45 kilograms of plastic per year. And yet, plastic production is expected to double again over the next 20 years, based on current production. Often disposed of in nature, plastics take years to break down and between 8 and 13 million tonnes of plastic enter the oceans each year¹. Leakage of plastics into natural systems endangers the quality of soil and water with impact, for example, on fish, cattle, or humans. Single-use plastic products end up killing marine life and entering the human food chain. The scale of plastic waste pollution has long since become an important global issue.

So, countries around the world are trying to do something about it and are stepping up regulation on plastics. Approaches differ from targeting plastic production, plastic use, or the handling of the resulting waste at the end of the product's useful life. Till recent, countries have focused more on how to collect and recycle plastic waste, which plays an invaluable role in the circular economy.

Beyond Recycling

For example, Bangladesh and Rwanda were among the first countries with more comprehensive bans on plastic

bags. In 2002, the south Asian country banned the use of plastic and polythene bags in an effort to stop them blocking the water drainage system, repeatedly causing floods. However, in spite of public backing, enforcement of the ban was weak and plastic bags are still widely used in Bangladesh today, particularly in food markets. In Rwanda, however, regulation on plastic bags started the journey to become one of Africa's cleanest countries. In 2008, the Rwandan Government banned plastic bags by law. The Act prohibited manufacturing, import, use, and sale of non-biodegradable polythene bags. The ban includes strict border control and fines for anyone using plastic bags. As one of the first countries in the world to ban plastic bags, Rwanda has set an example in tackling plastic pollution.

Transforming minds: public acceptance of the policy facilitated success

If we take a closer look at the example of Rwanda, its problem with plastic waste was not so much the quantity, but rather the lack of waste management. Lacking better ways to collect and treat plastics, the bags were disposed on the spot. Back in 2004, the Ministry of Environment had issued a ministerial order banning plastic targeting manufacturers, distributors and traders from using bags in their value-chains. Though without addressing consumers, the



Agenda 2030 - Target 12.5: "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse".

¹ Jambeck, et al., 2015

“Creating a toxic-free environment requires more action to prevent pollution from being generated as well as measures to clean and remedy it.”

The European Green Deal²



A plastic ban needs the pressure of an unsustainable problem, a multi-stakeholder commitment to change society’s mind-set, plus strict enforcement, with regulatory and administrative structures, human resources and capacities in place.

order proved ineffective. Having realised this shortcoming, the government then initiated a number of media and community campaigns to raise public awareness, consult stakeholders and strengthen local governments. In 2008, when the new law passed, Rwandans were ready to accept a world without plastic.

Umuganda, Rwanda’s monthly community work day, was at heart of the government’s dissemination efforts involving plastic bag collections and this was coupled with information about the up-coming bag ban, and educational communication on the harmful impact of plastics on human health and the environment. As monthly community service is mandatory in Rwanda for all people aged 18 to 65, sufficient outreach over the years was a good bet. Rwandans not participating in community service were confronted with penalties. Through publicising the proposal of a ban in 2004, the ensuing media campaign and community service helped instill a recycling mind set among citizens.

Tackling realities: when policy confronts context

Rwandan policy makers chose a large number of policy instruments to implement the plastic ban. Informative measures promoted environmentally friendly alternatives and stimulated the

industry to change tactics. Regulatory measures included the ban, the threat of imprisonment, as well as mandatory collections. Through the imposition of fines, the government added a further economic motivation. Tax incentives were provided to companies willing to invest in plastic recycling equipment or in the production of environmentally friendly alternatives.

It is important to note that enforcing the policy on banning plastic bags was not without obstacles. A black market emerged, triggered by a reluctance to behavioural change, but also a lack of alternatives to replace plastic bags. The ban on plastic bags has had a negative impact on the production costs of most manufacturing companies. Farmers complained about the price of bio-degradable bags and industry demanded support for those companies producing plastic bags who would suffer from the ban. However, given the comparatively limited strength and size of plastic manufacturers in Rwanda, the industry was not able to shape or influence government action. The Rwandan Government has been running a services--based development strategy, which was targeting tourism and transforming Kigali into a ‘model’ city – thereby inviting investors to a clean and safe destination. Under the Rwandan ‘VISION 2020’, service sectors like tourism were favoured over manufacturing.

² European Commission: Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions on The European Green Deal, December 2019, COM(2019) 640 final, available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588580774040&uri=CELEX:52019DC0640>

Impacts arising from the ban are apparent. More than ten years later:

- Rwanda is cleaner and environmental conditions improved (Kigali was awarded the cleanest City in Africa);
- New and environmentally friendly alternatives (paper bags, more durable and multiple use bags) are available in the country and in use;
- Plastic bag possession and/or trading, deemed as environmental crime, is almost non-existent today; and
- Rwanda is recognised as an eco-tourism destination.

From 2008 to 2017, Rwanda saw a yearly GDP increase of between 4.7 and 8.9% and an increase in per capita GDP from \$1,229/year in 2008 to \$2,080/year in 2017 (IMF, 2018). In spite of reducing plastic imports and use in the country, no severe impact on economic growth was witnessed. The key driver for transformation with regard to plastic bags was the strong political will to enforce the ban. Continuous campaigns and a non-existent plastic lobby accelerated the transformation as the government did not have to advocate against business power linked to associations and local manufacturing groups.

Inspiring change

It is fair to say that Rwanda acted as a catalyst in the region. The Government put plastics repeatedly on the agenda of the East African Community (EAC). Since then, Tanzania banned plastic in 2006, Uganda in 2007, and Kenya in 2017. Kenya introduced one of the world's toughest bans on plastic bags — being caught using a plastic bag is punishable

by up to four years in prison. Meanwhile, countries around the world are stepping up action against plastic bags. Since 1999, more than 50 countries and states adopted a ban on the production, sale or use of plastic bags.

Efforts go beyond banning bags where a few examples highlight more recent initiatives. For instance, a number of countries have started to regulate the use of micro-plastics in cosmetics and the use of disposable plastic items. Costa Rica, Rwanda and India have either announced or adopted plans to phase out all forms of single-use plastics. Costa Rica's strategy aims to replace all single-use plastics such as plastic cutlery, straws, foam containers and coffee stirrers with alternatives that are biodegradable by 2021. Its implementation includes municipal incentives, policies and institutional guidelines for suppliers, replacement of single-use plastic products, research and development, and investment in strategic initiatives.

Triggers for transformation

The Global South has been a pioneer in banning plastic bags. In countries without waste management and recycling infrastructure, the pollution of plastic bags is pervasive. The fact that disposed bags are more visible, that they are linked to the spread of water-borne diseases and impact livestock pushed policy makers to adopt plastic bag legislation. The pressure of such an unrelenting problem often helps kick transformation into action in many cases. Political feasibility is another trigger for transformation. In countries where such a ban did not cause controversy, the transition to a plastic bag free economy was more



Informative measures stimulated environmentally friendly alternatives within the industry



Regulatory measures included the ban, the threat of imprisonment, as well as mandatory collections.



Tax incentives were provided to companies willing to invest in plastic recycling equipment or in environmentally friendly products.





Increase in per capita GDP from \$1,229/year in 2008 to \$2,080/year in 2017 in Rwanda.

Greening EU COOPERATION

Integrating environment & climate change

Environment and climate change mainstreaming is a legal EU requirement, essential to meeting international and internal commitments, and to supporting sustainable development worldwide. The EU is actively doing its part through the European Green Deal and will support partners to do the same.

For advice and training on environment and climate change mainstreaming, contact:

INTPA and NEAR

Environment & Climate Change Mainstreaming Facility

T: +32 229 622 83

E: INTPA-GREENING-FACILITY@ec.europa.eu

E: NEAR-GREENING-FACILITY@ec.europa.eu

successful. Connecting a ban to long-term sustainability policies, as was the case in Costa Rica or Rwanda, provides legitimacy and supports acceptability of the regulation. Furthermore, plastic regulations must be feasible in practice. Experience from Bangladesh showed that intentions alone are not enough. A plastic ban needs strict enforcement, with regulative and administrative structures, human resources and capacities in place. For example, the implementation of the 2009 ban on plastic bags in Morocco highlighted the importance of ensuring alternatives to plastic bags are easily accessible in order to generate public acceptance of the ban. Banning plastics requires a multi-stakeholder effort engaging consumers, retailers, and manufacturers as well as the media and politics in order to achieve a change in mind-set across society.

Focus for the future

Banning plastic production and its use cuts the problem off at the source. However, it does not address already existing plastic pollution. That is why plastic remains on the top of the international agenda for waste management. The Fourth session of the UN Environment Assembly (UNEA4) and the Conferences of the Parties to the Basel and the Stockholm Conventions discussed plastics and voiced concerns over the impact of plastic waste, marine plastic litter, and micro plastics. Globally, waste collection, management

and recycling rates need to increase and global efforts must reinforce the economic attractiveness of keeping plastic that is recycled in the economic system. Resource recovery across the whole life cycle is key to a green, and notably a circular economy. Developing quality standards for sorting plastic waste and recycling plastics can boost demand for recycled plastics. However, investments are required to foster innovation towards creating materials and formats that reduce the negative environmental impact of plastic packaging leakage.

Bangladesh aims to decouple plastics from fossil feedstocks. Scientists are exploring renewably sourced feedstocks, converting jute fibre into low-cost biodegradable cellulose sheets. Its large-scale adoption is still challenging due to the relatively high production cost but the Government supports lowering the cost in order to enable the production of jute bags with the look and feel of the former plastic ones. As Bangladesh's plastic ban did not eradicate plastic bags, the Government is now seeking another strategy to turn this challenge into an opportunity.

To tackle the plastic tide, a consistent change in policy is needed that focuses on waste avoidance, plastics reduction and a circular economy that keeps the materials in the economic cycle for as long as possible.

Disclaimer: These stories represent inspirational examples of transformational change highlighting environmental and climate sustainability. They have been compiled by the EU to illustrate what development cooperation and national partners can achieve, but are not necessarily related to projects funded by the EU. Therefore, the EU does not presume to take credit for the initiatives, nor their results, which remain those of the actors involved.